IRC OPERATIONAL MANUAL
Version 4 (May 2003)
Del 33A

The IRC Network – Reports and Guidelines

1. CONTENTS

1 INTRODUCTION

1.1 WHAT IS THE PURPOSE OF THE IRC OPERATIONAL MANUAL

The operational manual presents an overview of the tasks of the IRC network and the methodologies that are employed to complete these tasks. The information it contains is based upon the experiences of the members of the IRC network and many of the chapters have been produced in conjunction with IRC Working Groups. The manual has 4 purposes:

New Members
The manual has been constructed in such a way to allow new members of the IRC network to gain an overview of IRC tasks, working practices and methodologies. The manual follows the TTT process from company recruitment through to the signing of a technology transfer agreement, in essence providing a crash course in strategies to aid the technology transfer process.

Best Practice
To offer IRCs examples of how other IRCs have been able to increase their success rate in terms of TTT, the strategies they have adopted to make themselves more effective.

Code of Conduct
The document considers how to improve the commitment of companies to the IRC process and how to increase the professionalism of IRC-IRC interaction.

Standardisation
Allow the IRC network to develop a standard approach to certain key services and in doing so improve the service delivered to their clients.

1.2 HOW TO USE THE DOCUMENT

The operational manual is structured around the 5 Technology Transfer Steps identified jointly by Standardisation Working Group and the Central Unit (See Figure 1). Each of these 5 steps will be considered in detail.

- **Step 1**   Recruiting Innovative Companies
- **Step 2**   Company Visits & Technology Audits
- **Step 3**   Technology Offers & Technology Requests (BBS)
- **Step 4**:   Brokerage Events & Technology Transfer Missions
- **Step 5:**   Transnational Technology Transfer Negotiations

1.3 WHAT IS AN INNOVATION RELAY CENTRE?

The European Commission has established 68 Innovation Relay Centres (IRCs) throughout Europe. There are centres based in the EU, the newly associated countries; (Latvia, Lithuania, Estonia, Poland, Czech Republic Slovakia, Hungary, Bulgaria, Romania, Slovenia) as well as in Iceland, Israel, Norway, Cyprus, Malta and Switzerland. These centres have been created in order to facilitate the transnational transfer of innovative technologies to and from European Small Medium Size Enterprises (SMEs). These innovative technologies may come from other companies, research organisations or higher educational institutes (universities, technical colleagues etc.). Most IRCs are hosted by organisations such as university technology centres, chambers of commerce, regional development agencies or national innovation agencies, although a small number of IRCs are hosted by private consultancy companies.

1.4 WHAT IS TRANSNATIONAL TECHNOLOGY TRANSFER?

There are numerous definitions of technology transfer available, however in terms of the IRC network it can best be described as the successful application and/or adaptation of an innovative technology

developed in one organisation to the meet the needs of one or more other organisations. The originally the focus for the IRC network and its predecessor the Value Relay Centre Network was the commercialisation of the innovative results of European funded RTD, from research organisations to SMEs. Transfer from SME to SME now forms an essential part of the technology transfer equation. It should also be noted that technology transfer not only includes transfer between organisations but also between different industrial sectors. Technology transfer is deemed to have been achieved once a licensing agreement, a joint venture agreement, a manufacturing agreement, and/or a commercial agreement with technical assistance has been signed.

1.5 WHAT ARE THE KEY TASKS OF THE IRC NETWORK?

The following information, taken from the IRC Call of April 2004, gives the clearest indication of what the task of the IRC network are:

The IRCs will concentrate on SMEs as the principal target group, but other organisations will be included, such as universities, research centres and, where appropriate, larger companies, as well as professional and trade associations, technology brokers and development agencies. Special attention will be paid to less-favoured regions. The main tasks of the IRCs will be to:

- *Promote the transnational transfer of technologies and knowledge, whatever their origin, in accordance with the needs of the local industrial, economic and social fabric*
- *Stimulate the capacity of firms to adopt new technologies by establishing their needs and ability for transnational co-operation and partnerships*
- *Promote the transnational dissemination and exploitation of the results of Community research, notably those results identified as suitable for third party exploitation and including co-operation with EUREKA and ESA (European Space Agency)*
- *Provide other key services which help promote or facilitate innovation and transnational technology transfer*
- *Pursue possible synergies between the IRCs and the Innovating Regions in Europe (IRE) network*
- *Develop new methods, e.g. for the promotion of transnational clusters and/or measures to facilitate the development of the European Research Area.*

SERVICES TO IRC CLIENTS
Please note that as this part covers the key services of the IRCs it should have most of the resources dedicated to it (in the order of 70% of the total manpower.

a. Transnational Technology Transfer (TTT) and RTD exploitation Services
Inward TTT: *Identifying technology needs in local industries and matching them with innovations and technology offers provided by other IRCs or other sources, in order to stimulate trans-national technology/innovation co-operation. IRCs have to be aware of and responsive to the scientific and technological requirements of local industry so that dissemination activities can be targeted at the said local industry. IRCs have to identify, in co-operation with other IRCs and other relevant actors, results and suppliers of technology, in a European context, relevant to the needs of their local industry and promote them in their regions, assisting their local clients with the adoption of the new results and technologies through the conclusion of agreements.*

Outward TTT: *Identifying exploitable technologies and research results in their region in order to promote them through the network and to generate transnational technology/innovation agreements. The IRCs will assist local clients that are owners of RTD results and technologies by promoting their transnational exploitation and transfer in a European context. The role of the IRCs should subsequently be that of providing support on exploitation, technology transfer and innovation issues (intellectual property, etc.) thus assisting their local clients in the technology transfer process.*

Exploitation and dissemination of RTD results: *Identifying the results of Community research, notably those results identified as suitable for third party exploitation and promoting them in their regions*

in line with the needs of their local industry. In addition, IRCs should identify the owners of such RTD results in their region and assist them in promoting their results in other countries.

This work would chiefly be carried out, in a European context, through co-operation with other IRCs (and possibly in co-operation with other networks), the CORDIS database and through direct contact with the thematic priorities of FP 6. Special attention is to be given to the knowledge stemming from Community RTD activities and co-operation with the thematic priorities themselves should be established and developed by the IRCs. This line of action also includes co-operation with EUREKA and ESA (European Space Agency) as per the operational arrangements shown in Annex 10.

Typical services: *Typical activities and services relating to Transnational Technology Transfer (TTT) and RTD exploitation might include but would not be restricted to the following:*

- **I - awareness** : e.g. promotion of the service through target mailshots, telematic means, publications, *seminars or visits. Publication of technology opportunities in relevant media.*
- **II - contact** : *e.g. technological audits/technological surveys or sectorial group meetings for identification of local needs. Organisation of technology transfer events, workshops, open days, seminars. Participation at exhibitions. Direct contact with SMEs and other pertinent players. Development of databases of the requirements of local companies.*
- **III - assistance** : *e.g. search for external technologies to match the identified needs/ dissemination of technology-profiles and partner-search for exploitation of the identified technologies through transnational co-operation. Networking and joint transnational actions. Assistance in the setting up of face to face negotiations between potential partners. Assistance in the preparation and conclusion of agreements and on technology-absorption/technology exploitation plans. Search for additional expert services on these matters, possibly in the framework of existing national or Community support schemes in this area.*
- **IV - signed agreements**: *Assisting in delivery of signed technology transfer/technology co-operation agreements*

1.6 WHAT IS THE ROLE OF THE IRC?

The role of the IRC network can simply described as the promotion of innovative solutions by bringing together of organisations and companies that have technology needs or technology to offer. Through the matching of these needs and offers the chances of technology transfer can be increased. Although the description of activities is simple the process and methodologies behind technology transfer are time consuming and rarely straightforward. In the following pages the process will be discussed in detail.

IRC Support services

FINDING THE COMPANIES

RECRUITING COMPANIES

FINDING OUT ABOUT THE COMPANIES

COMPANY VISIT   **TECHNOLOGY AUDIT**

PRODUCING A TECHNOLOGY PROFILE

TECHNOLOGY OFFERS   **TECHNOLOGY REQUESTS**

MATCHING COMPANIES & TECHNOLOGY PROFILES

BBS   **BROKERAGE EVENTS**   **TTT MISSIONS**

TRANSNATIONAL TECHNOLOGY TRANSFER

TTT NEGOTIATIONS

TTT SIGNED AGREEMENT
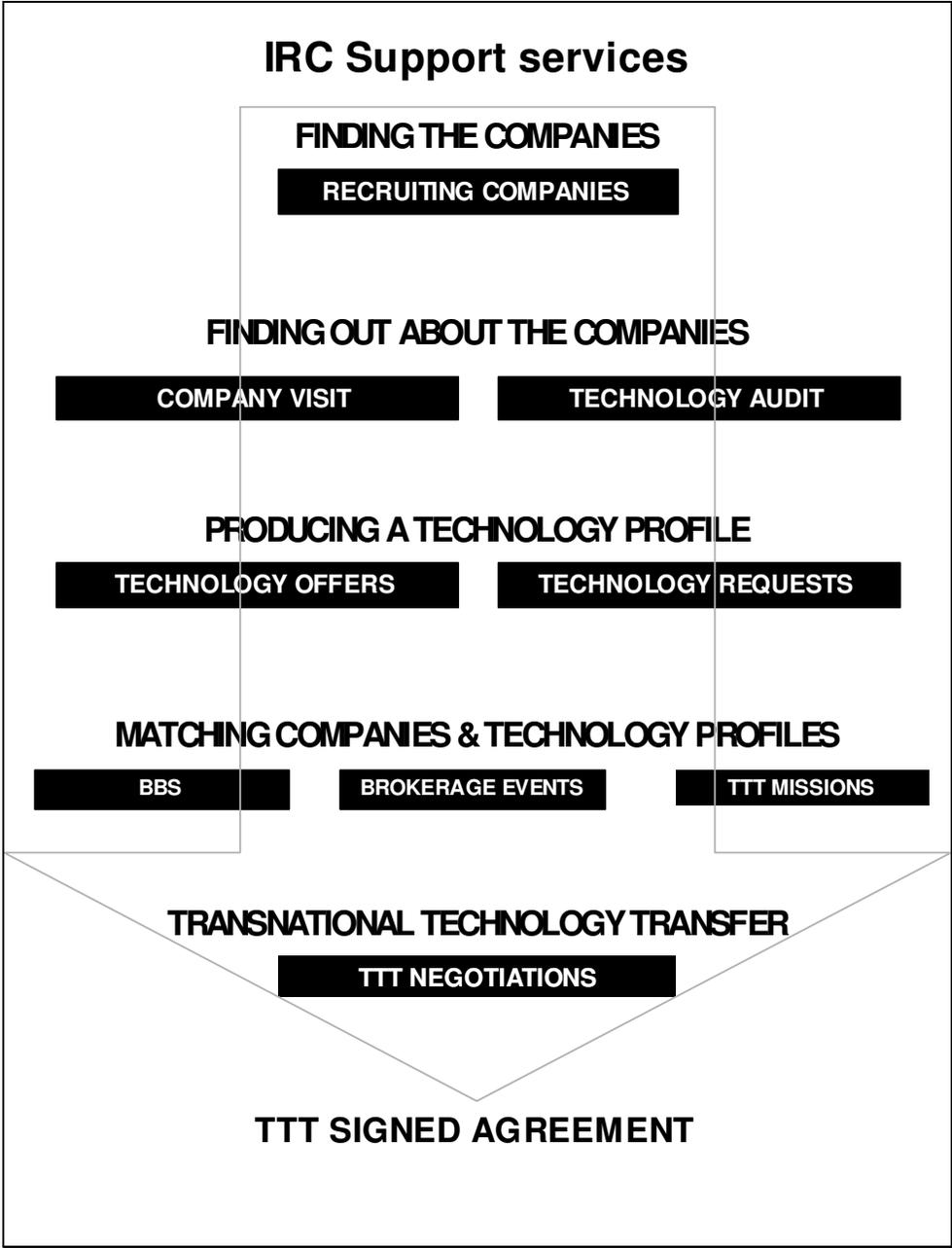
FIGURE 1: THE IRC STEPS TO TECHNOLOGY TRANSFER

TRANSNATIONAL TECHNOLOGY TRANSFER SERVICES

2 IRC DEFINITION OF TRANSNATIONAL TECHNOLOGY TRANSFER

Summary: *The elements of technology transfer are considered and INNOVATION is defined. The success story reporting requirements are considered as well as the rules governing the publication of success stories. Valid types of technology transfer agreements are defined* **Mark Schneider**

2.1 ELEMENTS OF TTT

Developer: the owner, or source of the innovative technology, product, process, expertise, or know-how. This can be
- A private company
- A research organisation
- A university
- A Technology Centre
- An Individual

Recipient: the organisation or company that acquires and uses the innovative technology, product, process, expertise , or know-how. This can be
- A private company
- A Research organisation
- A university
- A Technology Centre
- An Individual

(N.B. The developer and recipient cannot be from the same company or organisation)

2.2 IS IT INNOVATIVE?

In terms of the IRC network innovation can be defined in the following ways:
- New to Europe
- New to the Recipient's region of Europe
- New to another industrial or business sector; a new use for an existing technology

2.3 VALID COUNTRIES

TTT is only valid if the Developer and Recipient are located in countries that are members of the IRC network, that is to say:
- Member states of the European Union
- Nations with affiliated status: Iceland, Norway, Israel, Cyprus, Switzerland
- The pre-accession states of Eastern Europe

In principle the network is not open to companies from countries outside of this group. However, if a Non-European company has a European based subsidiary that has developed a technology, then the IRC network can promote that technology to the rest of the network. The criteria is that the innovation was developed in Europe. Similarly, if the European based subsidiary has a technology need then the network is entitled to try and meet that need. Once again the criteria is that solution will benefit the European based company.

2.4 TRANSNATIONALITY

TTT is only valid if there is an element of transnationality, the technology must be transferred from one country to another. Where an IRC extends over a national border then it is possible for both the Developer and Recipient to be clients of the same IRC.

2.5 CLAIMING A TTT AGREEMENT?

An IRC will be able to claim an agreement if it can provide clear evidence that it assisted significantly with the successful completion of a TTT agreement. The IRC reporting a signed TTT agreement will be asked to provide a **TTT Statement Letter** signed by its client and a **TTT Agreement Report,** completed by the IRC to validate the transfer. If 2 IRCs are involved in the TTT agreement and each wishes to claim the agreement, both will be required to submit a TTT Statement Letter and TTT Agreement Report

The success stories form can be found in the Library IRC at the following location http://www.ircnet.lu/src/library/home.cfm?cat=198

2.6 CONFIDENTIALITY

Clearly confidentiality is an important issue for companies and cannot be ignored by the CU. If an agreement is confidential then all information disclosed to the CU will be treated as confidential. However for an TTT agreement to be claimed a signed TTT statement letter must be submitted by an IRC whether the agreement is confidential or not.

2.7 WHEN CAN A TTT BE PUBLISHED?

There are a number of criteria that must be fulfilled before a TTT agreement can be published:
- 2 or more IRCs must be involved in the agreement
- The success stories form must be fully completed
    - Both IRCs must submit TTT Agreement Reports
    - Both companies must sign the TTT Statement Letter
- Both companies must be happy to have the details of the technology transfer published, i.e. confidentiality should not be an issue

It should also be noted that it is not necessary for 2 IRCs to be involved in a successful TTT agreement, it is also valid for an agreement to be concluded with the involvement of a single IRC. However, only success stories involving 2 or more IRCs will be published.

2.8 THE ECONOMIC IMPACT OF THE TTT

For the TTT agreement to be valid there must be some element of economic benefit to the parties involved in the transfer. Where possible the IRC will be asked to define the economic benefit of the TTT agreement when completing TTT Agreement Report. This benefit can be defined in 3 ways
- Employment creation
- Increase in company turnover
- Royalties or income generated from the transfer of know-how or a patent

2.9 VALID TYPES OF TTT

Although a specific definition of technology transfer is difficult to provide what should be clear is that any agreement must be both tangible and transparent regarding the technology transferred and that the resulting partnership must be considered of value by both parties involved. In most cases TTT involves the transfer of know-how, technology, or expertise from the Developer to the Recipient. For example, the element transferred may describe the technology behind a process that will enable the recipient to either manufacture the product or implement a new process, or system. The following are descriptions of what are regarded as valid TTT agreements for the IRC network.

Licensing Agreement
The transfer of certain rights from the Developer of a technology, process or know how to the Recipient, in return for a fee or share of royalties. An **Industrial Franchise** can be regarded as a type of licensing agreement. This type of agreement allows the Franchise holder (Recipient) to obtain the Franchisee's (Developer) know-how, or expertise in order to manufacture a product that will be distributed under the franchisee's brand in a given territory.

Technical Co-operation
The following types of cooperation agreements are regarded as valid:
- Between parties to adapt a technology for a new application or sector
- Between parties to develop a technology to meet new market needs

- Co-development of a new product using the expertise of the Developer and the production facilities of the Recipient
- Between parties to develop a new version of an existing product to meet market needs

Consortia agreements, joint ventures and technological agreements between customer and suppliers can also be classified as technical co-operation.

Joint Venture
These types of agreements provide the most complete form of agreements between companies. They imply the creation of a formalised link between companies with the sharing of commercially sensitive information to allow development of new technologies, processes and products.

Commercial Agreement with Technical Assistance
The provision of a number of services in support of, or essential to a transfer of technology:
- Assistance with starting up an installation
- Advice on the use of a new process
- Quality control
- Technical Training
- Maintenance & machine repair

Technical assistance ensures the effective start-up and/or maintenance of the transferred technology, but also covers the installation of technology (assembly; engineering work; testing; training).

Manufacturing Agreement (Subcontracting & Co-contracting)
These types of agreements are only valid if they involve some element of the transfer of expertise, know-how, technology and/or training. There are 2 clear examples where these types of agreements are valid:

Subcontracting Capacity
The Developer transfers some of its know-how to the subcontractor to allow the subcontractor to perform the work required

Subcontracting Specialties
The Contractor selects the subcontractor on the basis of skills, expertise and know-how it possesses, to develop new processes and technologies.

2.10 What is not valid TTT

Agency/Distribution agreements
Agency and distribution agreements refer to agreements reached with an agent or distributor to find markets for a product. This is a purely commercial form of activity and does not fit into the definition of technology transfer because they is no technology transfer to the agent or distributor. The agent or distributor will receive information on the product, advantages, performance, costs etc. to help sell it, but this does not constitute the transfer of technology. The agent is simply signing an agreement that allows them to sell that product on to another company for commercial gain.

EUREKA & CRAFT
IRC partner searching for possible partners to participate in EUREKA proposals is not eligible. It is an upstream activity and therefore like CRAFT is not part of the IRC's remit. Once a TTT agreement has been signed between organisations and the technology defined within the agreement has been transferred, what happens after will not affect the status of the TTT. If the parties then decide to proceed with CRAFT, EUREKA or any other R&D funding, then this does not invalidate the signed TTT. However, if parties are considering a TTT agreement and then decide CRAFT or EUREKA is the most appropriate route to achieve that TTT agreement, this is not valid.

2.11 ANNEX 1: TTT STATEMENT LETTER

IMPORTANT: PLEASE ADD SUCCESS STORY CODE TO EACH TTT CASE REPORTED

Project Title	

Success Story Code*	

- *Success Story Code: (IRC Contract Number/Year in which it was achieved /Month/ Ordinal number indicating how many signed agreements have been achieved to date)*

Report of an Agreement between:

(1) **The Technology or Know-how Developer**
Name:
Address:

(2) **The Technology or Know-how Recipient**
Name:
Address:

I, the undersigned, as a bona fide representative of ………………………… (one of the above parties) confirm that my company/organisation received assistance and support from **the Innovation Relay Centre (IRC) network** to reach and sign the aforementioned Transnational Technology Transfer (TTT) agreement.

Signature   **Full Name**

Date   **Job Title**

As the Developer or Recipient of the technology would you be willing to have the successful Transnational Technology Transfer agreement publicised?
☐   YES   ☐   NO[1].

Assistance provided to the Developer (if applicable):

Name of IRC	
Contact Person at that IRC	

Assistance provided to the Recipient (if applicable):

Name of IRC	
Contact Person at that IRC	

Assistance provided by another IRC (if applicable):

Name of IRC	
Contact Person at that IRC	

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[1] *The Central Unit confirms that all information disclosed in this form will be treated in the strictest confidence*

2.12 ANNEX 2: TTT AGREEMENT REPORT

To be completed by the IRC

Success story code*:	

*** Success Story Code**: *(IRC Contract Number/Year in which it was achieved /Month/ Ordinal number indicating how many signed agreements have been achieved to date)*

1. Information about the transferred technology / know-how

Ref. TO/TR if applicable	Technology Title

Please describe in detail what was transferred (the technology, product etc., the innovation and the benefit)

2. Information about the signed Transnational Technology Transfer agreement

Type of the signed technology transfer
☐ licensing agreement / selling of a patent / industrial franchise
☐ technical cooperation agreement
☐ joint venture
☐ commercial agreement with technical assistance
☐ manufacturing agreement: (subcontracting – co-contracting)

Date of signature of the TTT agreement:	Place:

3. Information about the parties involved

DEVELOPER		RECIPIENT	
Name:		Name:	
Country		Country	
Contact name		Contact name	
Phone:		Phone:	
E-mail:		E-mail:	
Size:		Size:	
Turnover		Turnover	

IRC which assisted the **Developer**		IRC which assisted the **Recipient**	
Name	Country	Name	Country
Other IRC involved (if applicable)			
Name	Country	Their role	

4. Tools used to identify / assist Developer and Recipient

DEVELOPER	RECIPIENT
Date of first meeting with developer:	Date of first meeting with recipient

Type of services / assistance provided by the IRC to **Developer**	Type of services / assistance provided by the IRC to **Recipient**
☐ Company visit ☐ Technology audit ☐ Assessment of the technology / know-how ☐ Search for suitable matches ☐ Assistance with first meeting ☐ Assistance during negotiation phase ☐ Assistance with IPR issues ☐ Assistance with innovation financing ☐	☐ Company visit ☐ Technology audit ☐ Definition of technology needs ☐ Search for suitable technologies ☐ Assistance with first meeting ☐ Assistance during negotiation phase ☐ Assistance with IPR issues ☐ Assistance with innovation financing ☐

Please describe the role of the IRC the TTT Agreement

Tool(s) used to find the TTT partner for **Developer**	Tool(s) used to find the TTT partner for the **Recipient**
☐ Automatic matching tool ☐ BBS (profile submitted or responded to) ☐ Thematic group ☐ SME trade mission ☐ TTT brokerage event ☐ Staff exchange ☐ Direct IRC / IRC Contact ☐ Direct transnational contact with company ☐ Cluster Activity (specify) ☐ Others (specify) ☐	☐ Automatic matching tool ☐ BBS (profile submitted or responded to) ☐ Thematic Group ☐ SME trade mission ☐ TTT brokerage event ☐ Staff exchange ☐ Direct IRC / IRC Contact ☐ Direct transnational contact with company ☐ Cluster Activity (specify) ☐ Others: (specify) ☐

5. The Economic Benefit of the TTT

DEVELOPER		RECIPIENT	
Royalties or Income Generated in Euro (Estimate)		Annual Increase In Company Turnover in Euro (Estimate)	
		Employment Created (Number of new jobs)	
Please note that this section is not compulsory			

6. The Promotion of RTD Results

If the technology was developed as part of an RTD programme please specify which programme	
☐ EC framework programme ☐ Eureka ☐ JRC	☐ ESA ☐ Other (Please Specify)

3 A GUIDE TO RECRUITING INNOVATIVE COMPANIES

Summary: This chapter contains details of how to convince cynical SMEs that the IRC network is worth working with. Particular attention will be paid to **MAILSHOTS** as this is the most commonly used method to recruit companies in the IRC network.   ***Mark Schneider***

3.1 INTRODUCTION

There is little that is surprising or new about methods for recruiting companies, most are based on sales strategies that have been developed and perfected over a number of years. Consequently, the strengths and weaknesses of these methods are also well know. Even approaches developed to take advantage of advances in IT are based on traditional methodologies, only the medium is new. The aim of all the methods discussed in the following sections is to attract the interest of companies by convincing them that there would be a benefit to working with the IRC network.. This difficult exercise is made more complex because the IRC must focus on the search for innovative companies.

3.2 GETTING THE MESSAGE ACROSS

The market place is awash with companies and organisations offering support services to companies and in particular SMEs. At some point most SMEs will have received poor quality services and consequently will view any new offers with a degree of cynicism. Therefore, to be successful an IRC must find ways to convince SMEs that they are different from other support organisations and that they will deliver what they promise. The development of appropriate strategies to combat cynicism is particularly important when recruiting companies as this could be the only opportunity that an IRC will have to convince a company to become a client. Although there is no perfect way to recruit companies there are a number of things that should be avoided.

Offering Advice

Most companies do not want advice they want help. As most IRC staff are generalists it is unlikely that any advice they could offer would be useful to a company any way. Therefore, when recruiting focus on what assistance can be given to a company.

Unrealistic Services

Most companies will know what is feasible and what is fantasy, therefore an IRC should be realistic about what can done for a company. The IRC staff must be aware of the limits of the IRC services and make the company aware of them as well.

Short Term Strategies

Although an IRC may be recruiting for a particular event, the ultimate aim is to create clients that will become long term users of IRC services. Not only does this approach appeal to the majority of companies, it also makes economic sense for the IRC. One of the most expensive and time consuming elements of IRC work is company recruitment, therefore it is sensible to try and hold on to a company once it has begun to make use of IRC services.

3.3 WHAT INFORMATION SHOULD BE INCLUDED?

The message to the company will change depending upon the purpose of the recruitment drive. If it is a general recruitment then the message should focus on the strengths of the network, for example:
The network consists of 68 centres, 231 organisations, 1000 people
The network encompasses 31 countries including EU members, Associated Countries and the CEEC
It is the largest technology export / import network in the world
The purpose is help companies export their innovative technologies throughout Europe
The purpose is to help companies import innovative technologies from across Europe
The service is largely free
The service is confidential
The service is rapid, once a TOTR is produced it is sent to the network within 24 hours of submission to the CU.
If the purpose of the exercise is to recruit companies for a particular event then information on the network is less important and the IRC should focus on
The details of the event

- The objectives of the event
- The benefits to the company
- The cost
- What will be required of the company

3.4 METHODOLOGIES

Telesales
As the name suggests this is recruitment via telephone. Generally the telephone calls are unsolicited and as a result response rates are low, normally around 1-2%.

Improving Response Rates
Response rates can be improved by adopting different strategies:
- **Training**: Telesales is a skill and like any skill requires training to be mastered properly.
- **Script**: A script must be worked out in advanced of the telesales campaign and then be followed by those recruiting the companies. Software can be purchased to support this activity.
- **Focus**: Telesales is most effectively applied when a specific event or service is being promoted. Generally, if this focus is extended to include a particular sector then results can be further enhanced.
- **Source Information**: The IRC requires up to date, accurate, filtered company information to achieve useful rates of response. Of particular importance is the right contact details. If information on companies is being taken from a telephone directory then the response rate will probably be less than 1%. However, if an IRC can persuade a trade association to give access to its company database, then this focus will increase the hit rate. Other sources of company information include regional support organisations, regional and national government agencies, chambers of commerce, research centres etc. As well as having an effect on the response rate the source information will dictated whether the companies are innovative or at least open to innovation.

Who should undertake the work?
Unless IRC staff are trained, telesales can only be truly effective if a telesales company is employed

Advantages
It is an effective way to recruit companies at short notice.

Disadvantages
It is time consuming, labour intensive and expensive. If a telesales company is employed then it is less time consuming but more expensive for the IRC.

Conclusions
Telesales should only be used if an IRC has something specific to promote, but should never be used as the main method of company recruitment.

Mailshots
Mailshots are widely used by the IRC network to recruit companies. Generally, most are unsolicited and response rates are therefore low, around 2%.

Improving Response Rates
As with telesales the response rate can be improved by adopting certain strategies.
- **Source Information**: The source of the company information is the most important element for ensuring an above average rate of response.(see above).
- **Fax Back Forms**: Response rates can be doubled by including a fax back form with the letter. This form should be designed in such a way that contact name and company details are already completed, allowing the company to simply tick the appropriate boxes.
- **Supporting Documentation**: Where possible an IRC brochure should be included with the letter so that if the company is interested background information is available.

- **Focus**: Once again if the mailshot is related to a particular event, or service and targets a specific industrial sector, then response rates are likely to increase.
- **Piggybacking**: If information is sent out with the logo of a trade association, local support organisation, or government department, it is likely to be taken more seriously. This piggyback approach, being carried by a larger, or higher profile organisation, allows an IRC to reach companies that it would not have been able to reach otherwise. The only difficulty with piggybacking is that the organisation providing the support must first be persuaded that the IRC will not damage its credibility with its clients. The best way to convince is to highlight previous successes or guarantee success. Unfortunately, one failure can permanently damage the IRCs' reputation with other support organisations.

The Letter (Annex 2)

The structure and content of the letter can have a major effect on the response rate. Once again there are certain techniques that can be used improve response rates:

- **Clarity & Concision**: The letter must be clear and to the point. Most company representatives will only give unsolicited mail a cursory glance. The letter should be as short as possible, however if it is more than one page long ensure that the last line on the page breaks in the middle of a paragraph or sentence. The company is more likely to turn the page if this is done.
- **Headline**: The most read and therefore the most important part of the letter is the opening headline. It is important that the headline immediately grabs the attention of the reader.
- **Get to the point**: The letter should not begin with background information, it is important to get to the point and explain why the company is being contacted.
- **Selling**: The objective of the letter is to sell something to a company, whether it be the idea of a company visit or attending a brokerage event. Therefore the benefits of what is been sold must be made plain.
- **Personalise**: Where possible the letter should be personalise, is it part of the campaign to turn a contact into a client.
- **Structure of the letter**: Where possible bullet points and paragraphs should be used to break up the text, it will make the letter look more interesting and easier to read.
- **Wording**: There are certain words such as free, limited, exclusive, that are likely attract the attention of companies.

Advantages

Mailshots tend to be less time consuming than telesales, once the letter is produced, the same version can be sent to all the companies being targeted. Also specialised personnel are not required to delivery the service.

Disadvantages

Although less time consuming in one respect, only one letter is produced, there are other elements that take time, particularly the packaging or "stuffing" of envelops. There are also cost implications, such as postage.

Conclusions

Even with its disadvantages a mailshot is generally a more effective way of recruiting companies than telesales.

Mailshots via the Internet

Advantages

Email mailshots offer an inexpensive and quick way to reach innovative companies. It is still generally true that only the more innovative companies are online. Therefore by undertaking an email mailshot an automatic innovation filter is applied to the recruitment process.

Disadvantages

The advantages of this method are also the disadvantages. As email mailshots are easy and cheap to undertake, they are widely used and abused by organisations and generally ignored by companies.

Conclusions

As with the other methods already described, if the mailshot is focused and some company research is undertaken, response rates can be improved.

Media

Outlets for IRC recruitment information are many and varied, but can generally be grouped under 3 headings; print including magazines and newspaper articles; radio and television and the Internet. Media recruitment has common advantages and disadvantages.

Advantages

The IRC is only producing one article, or presentation but has the potential to reach a far wider audience than through telesales or mailshots. Also the responsibility for the dissemination of information lies elsewhere, this has clear benefits in terms of time, effort and expense.

Disadvantages

The IRC has very little control over who receives, or responds to the information once it is disseminated. The other consideration is that with improved access and a higher market profile comes the pressure to deliver a competent and useful service.

Print

This category can be divided into two, articles paid for by the IRC and articles requested of the IRC. In terms of cost the latter is preferable because it will be free, however the disadvantage is that there is less control over the content of the article and its position and size in a magazine or newspaper. Beyond these considerations the rules are most or less the same as for mailshots. The quality and amount of response will depend upon:

- **Clarity**: It is important to briefly and clearly highlight the benefits of working with an IRC.
- **Focus**: Although a newspaper will have a wide circulation it will not necessarily reach innovative companies. In fact a newspaper article can be counterproductive, resulting in calls from a wide spectrum of companies and individuals. Although circulation may be smaller, because of their sector focus trade magazines, scientific journals and government publications offer more opportunities to connect with innovative companies.

Radio & Television

Although exposure via radio and/or television can bring the IRC into contact with a potentially huge audience, unless there is some focus once again the effect can be counterproductive.

Internet / IRC Website

Once established a website is an inexpensive way of advertising services and offers a self-selecting method of recruiting innovative companies. It is generally true that only the more innovative companies are online, therefore any responses received via a website are likely to be from companies that fit the IRC target audience. Once a website is established the key to successful recruitment is keeping the site up to date. An out of date a website will ultimately be a hindrance to company recruitment.

Conferences & Exhibitions

Conferences and exhibitions offer an IRC the first opportunity of direct contact with companies. Commonly, an IRC will take, or share stand space at an event in an effort to promote its services. Although there is direct contact with companies, recruitment is not straightforward. The majority of those attending the event are not there to visit the IRC, the IRC is simply a diversion. Therefore, companies have to be persuaded to visit the IRC stand.

- **Gimmicks**: The IRC can give away freebies (key rings, pens etc.) food can be provided, or a prize draw can undertaken (business cards are collected and then one is drawn to win a prize).
- **Piggybacking**: The IRC can become more attractive if stand space is being shared with a higher profile organisation. As with all other attempts at the piggybacking the catch is persuading the higher profile organisation that the IRC will be an asset and not a hindrance to its own efforts at recruitment or selling.

Advantages
The IRC has direct contact with companies. If stand space is rented then the IRC will also feature in the event catalogue, raising the profile of the IRC at the event.

Disadvantages
Taking stand space an event is both expensive and time consuming. To be really beneficial the stand must be manned for the entire length of the event. Also the majority of company representatives attending the event will be from sales departments, not necessarily the most appropriate people to try and sell IRC services too.

Conclusions
Generally, a stand at a trade fair is not a very effective way of recruiting companies, the amount of effort, money and time committed to the venture is unlikely to result in good company contacts. The cost, effort and amount of time committed to the recruitment exercise can be considerably reduced if an IRC attends the event as a visitor, using the event catalogue to identify and talk to appropriate companies.

Presentations/Seminars
An IRC is invited to give a presentation at a workshop, conference or seminar. For the first time the IRC has some degree of control over the recruitment, the companies are the audience, therefore they are more likely to be interested in what the IRC has to say. If the IRC can presentation itself in an effective way the chance of recruiting companies is high.

Advantages
As a recruitment method this is less time consuming and expensive for the IRC. The event is being organised by another organisation so the responsibility for recruitment lies elsewhere, the IRC need only prepare a presentation and turn up at the event.

Disadvantages
The IRC has no control over the make-up of the audience as recruitment is undertaken by another organisation. Also, although the companies are being addressed directly it is not completely interactive and the final outcome may be little more than an opportunity to disseminate information rather than engage with SMEs.

Conclusions
Presentations and seminars do offer a real opportunity to sell the IRC concept. However, to be asked to speak at an event the IRC must have something worth saying and a successful track record to back it up.

Referrals
This is by far the most effective method of recruiting companies because there is very little effort required. The companies are being sent or referred to the IRC so that half the recruitment battle is already won. The catch is that referrals are only likely once an IRC has established a successful and high profile reputation within the region it represents. Such a reputation can only be obtained through hard work, the establishment of good links with regional, local and national players, the delivery of results. However, this enough, it is also essential that those with influence are aware that the IRC is successful.

3.5 WHICH METHODS ARE THE MOST EFFECTIVE?
This is a difficult question to answer as response rates are dependant on numerous factors. In a recent UK report produced for the Department of Trade and Industry (Epicentre 2001) a survey of SME support organisations in the West Midlands was undertaken to try and identify the barriers to engaging with SMEs. One of the survey questions asked the organisations to rate different methods of recruiting companies, the results (See Annex 1) represent the responses of 28 organisations.

3.6 CONCLUSIONS

It is clear that all methods of company recruitment, apart from referrals, are flawed. Ultimately, the most success will be achieved through flexibility. A combination of methods should be employed and altered to suit individual situations. Generally, the more focused the recruitment activity the higher the response rate. Overall the most effective method appears to be a mailshot composed of the following elements:

- A sector based, focused recruitment
- Company details based upon a trade association database
- Fax back form included with the letter
- Promoting a specific event
- Recruitment supported by a regional or government body (Piggybacking)
- Recruitment supported by a trade association or similar organisation (Piggybacking)
- Letter followed up with a telephone call

References
Epicentre, 2000, Engaging SMEs – A final report for DTI future & innovation Unit – December 2000

3.7 ANNEX 1: THE MOST EFFECTIVE RECRUITMENT TECHNIQUES

Can you indicate your views of the effectiveness of the following techniques?
(NB. 1 = ineffective and 5 = very effective)

Mailshots

Telesales

Media

Conferences

Seminars

Visits

Clinics

CD-ROM
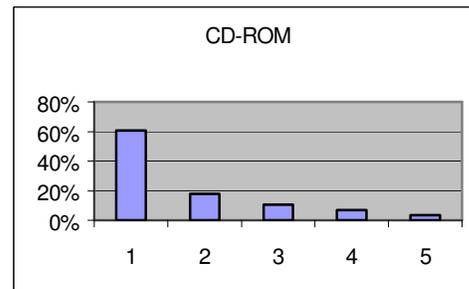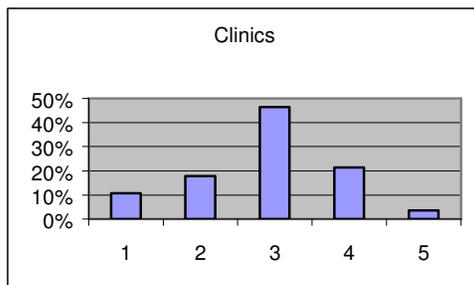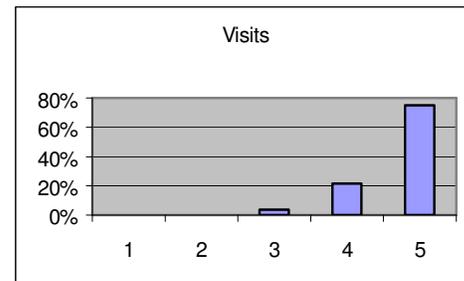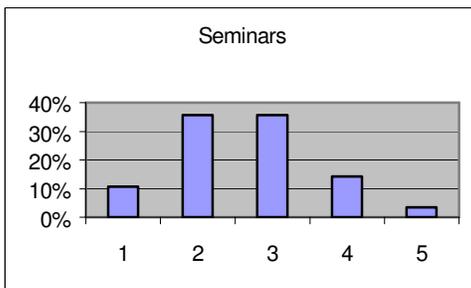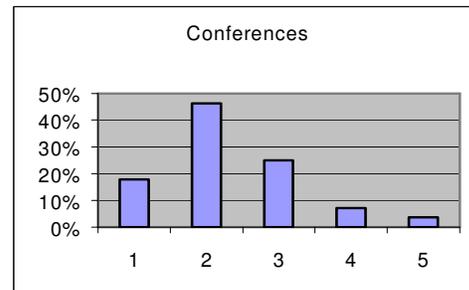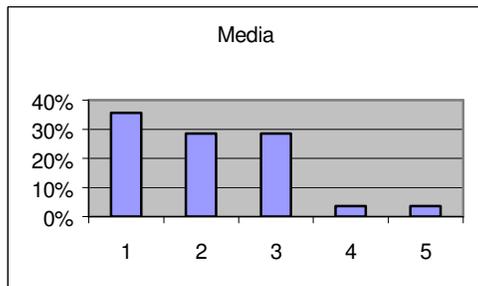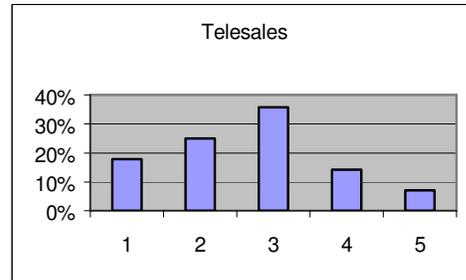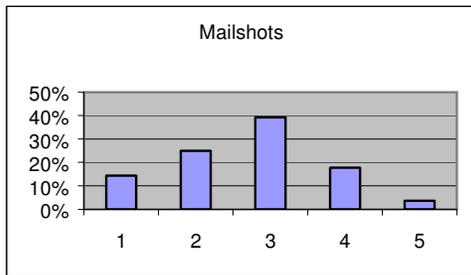
3.8 ANNEX 2: STANDARD LETTER

Dear Mr/Ms xxxxxx,

Are looking for European markets for your technologies? Are you interested in European technologies? As your local contact and entry point to a European wide innovation network we can help you with these objectives and much more besides. The Innovation Relay Centre (IRC) network was established in 1995 to help support small and medium size companies gain assess to innovative European markets and thereby assist with process of importing and exporting technology. Since 1995 the network has helped over 800 companies sign agreements to import or export technology. Your organisation could benefit from our expertise and that of our colleagues throughout the network and become the next success story.

Tell me about the network
The network consists of 68 centres, 230 organisations, 1000 people
- The network encompasses 31 countries including
    - All the EU Member States
    - The Newly Associated Countries, Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia
    - Iceland, Israel, Norway, Switzerland, Malta
- It is the largest technology export import network in the world
- The purpose is help companies export their innovative technologies throughout Europe
- The purpose is to help companies import innovative technologies from across Europe
- The service is free
- The service is confidential
- The service is rapid, technology profiles are sent to the network within 24 hours of submission to the CU

How does it work?
Each member of the network works locally to establish contacts with companies that are interested in exploiting European business opportunities. Working with the company they identify technology that it has to offer or technology that it needs. This information is then relayed to colleagues in the rest of the network where technology matches are created. If the match is of interest to the company behind the offer or request then network will help to bring the companies together.

What other services can the IRC provide?
We can complete a technology audit of your company
We can provide you with a technology watch service
We can arrange for you to attend technology brokerage events and accompany you on your travels
We can organise technology transfer missions and travel with you

How do I take advantage of the services?
Simply complete the accompanying form, indicating which services you are interested in and fax it back to xxxxxxx Alternatively visit our website at www.xxxx , complete the form on line and find out more about what the IRC network can do for you.

Yours faithfully

IRC FAX BACK FORM

For the attention of xxxxx xxxxxx (IRC Representative)

Company Name: Big Machine Company
Address:

Contact Name: Jim Smith

Telephone

Fax

Email

What can we do for you? (tick appropriate box)

☐   Are you interested in receiving a visit from a representative of the IRC network

☐   Would you like to receive more information on the IRC network

☐   Would you like to receive our bimonthly newsletter?

☐   Would you like to be informed of any future IRC events or activities

☐   Please remove me from company database and do not send me any more information

FAX BACK to XXXX XXXXXXX XXXXXXX
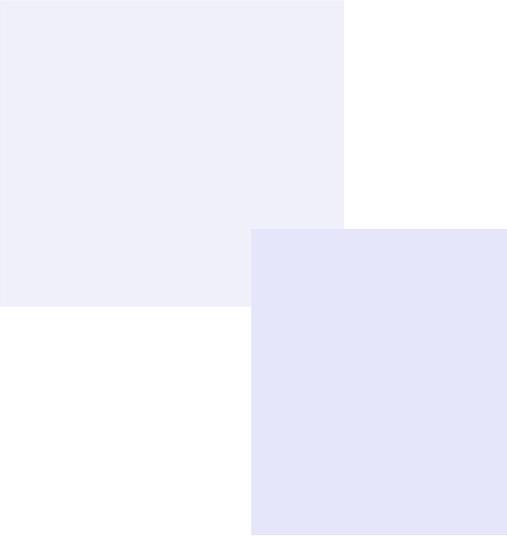
4 A GUIDE TO COMPANY VISITS

Summary: This section consider how to get the best from the short period of time with a company that the visit offers. Once the again the issue of cynicism will be considered and strategies will be suggested to overcome this problem.   *Mark Schneider*

4.1 DEFINITION

As the name suggests this is a visit by an IRC member of staff to a company's premises. Generally the meeting lasts about an hour and is held with the manager or marketing representative of the company.

4.2 PURPOSE OF THE COMPANY VISIT

Creating Clients

A company visit offers the first opportunity to sell the IRC concept directly to the company and begin the process of converting a contact into a client. The importance of the company visit should not be underestimated. If an IRC is not well prepared and the company is unimpressed, it is unlikely that another opportunity will present itself to recruit and all the background undertaken by the IRC work will have been wasted.

Useful to the Company?

The visit is a good opportunity for the IRC to find out if the company will benefit from using the IRC services.

Collecting Information

The company visit offers the best opportunity to find out about the company's products, processes, and technologies.

4.3 GETTING THE MESSAGE ACROSS

The problem of cynicism has already been mentioned in the section on company recruitment, however as it is a major problem it is worth referring to again. Most companies, particularly SMEs regularly encounter organisations that promise support and assistance. Companies tend to ignore most of these offers because they are not confident that the promises will be fulfilled. This cynicism in fuelled by previous bad experiences and can be difficult to overcome. If certain pitfalls are avoided then the chances of successfully recruiting a company can be increased.

Help not advice

Most companies do not want advice they want help.

Unrealistic Services

Many support organisations promise to much and then are unable to deliver. IRC staff should be realistic when working with companies. They should be aware of the limits of the IRC services and make the company aware of them as well.

Product rather than client

Many support organisations try to fit the client to the product to reach their targets. Targets are important, however they are more likely to be achieved if the IRC delivers services that are actually useful to the company.

Short term services

Many support organisations simply recruit companies to fulfil one particular target and then abandon the company. This approach is fundamentally flawed. It is estimated that it costs 7 times more to find new customers than to keep existing customers. It should be made clear that the IRC is interested in developing long term relationships.

4.4 WHO SHOULD UNDERTAKE THE COMPANY VISIT?

Ideally the IRC project officer who deals with the technology offers and requests should also undertake the company visit. Without this direct connection between the IRC, the network and the company, the transfer process is less effective. The best way to turn a potential client into a regular user of IRC services is to build a strong personal relationship based upon trust, professionalism and the delivery of an effective service. This type of relationship cannot be built at arm's length.

4.5 PRE-VISIT PREPARATION

Preparing the Ground
Before undertaking a company visit the IRC should first research the company and the sectors it is active in. Most of this background information can be gathered from the company's own publicity material and website, if one is available.

Information Pack
The IRC should ensure that an information pack is available to give to the company. The information pack should include:
- An IRC brochure, preferably containing a map of the network
- Examples of appropriate, sector relevant, TOTRs, downloaded from the BBS
- Information on appropriate network events and missions
- Examples of success stories, preferably involving the local IRC, with the economic benefit defined
- Information on other IRC services

4.6 DURING THE VISIT

Selling the Network
Wherever possible the presentation of the IRC network should be standardised and visual aids such as slides and overheads should be used. The presentation of the network should highlight the following points:
- The network consists of 68 centres, 231 organisations, 1000 people
- The network encompasses 31 countries including EU members, Associated Countries and the CEEC
- It is the largest technology export import network in the world
- The purpose is help companies export their innovative technologies throughout Europe
- The purpose is to help companies import innovative technologies from across Europe
- The definition of an SME
- The service is free
- The service is confidential
- The service is rapid, technology profiles are sent to the network within 24 hours of submission to the CU
- A description of the other services that can be provided including technology audits, brokerage events, missions

Collecting Information
The IRC should ensure that as a minimum, enough information is collected from the company visit to be able to produce a technology offer or technology request, this information should include:
- Name of contact person for future correspondences
- Basic company details such as number of employees, date established, approximate turnover
- A description of what the company does, manufactures or the services it provides
- The processes the company uses
- The technology the company uses

- The markets or sectors it supplies or works in
- An assessment of the innovativeness of the company
- Would it benefit from using the IRC network?
- Is the company interested in the network; would it be committed to the TTT process
- If a technology is being offered is it truly novel or is it an existing technology applied in a novel way?
- If the company has a prototype of the technology, has it been tested in the laboratory or in the field?
- What kind of partner is the company seeking? Industrial, academic, financial?
- What will be required from the partner? More research, manufacture under license, a joint venture?
- What resources (people, time, money) can the company commit to the project?
- What difference will it make to the company if the TO/TR fails?

Company Commitment

The commitment of the company to the technology transfer process is a fundamental issue, without it the IRC network cannot function effectively. Wherever possible the IRC should ask the company to sign some form of agreement, Annex 2 contains an example of such an agreement. If the company is interested in making use of the network then IRC must outline what will be expected of the company. The company must be prepared to:

- Respond to enquiries promptly
- Provide extra information
- Negotiate with other companies
- Disclose confidential information
- Keep the local IRC informed of all company/company discussions

If the company signs a commitment agreement it is also important the IRC outlines what services will it will be providing. It is unlikely that a company will sign an agreement without the IRC first committing to provide a certain level of service. Generally the commitment agreement signed by the company will also outline the obligations of the IRC (See annex 2). These obligations may include:

- The production of a technology profile
- The promotion of the technology profile through the network
- The screening and matching of any responses from the network to ensure that what the company receives is of use
- Regular monthly updates on the progress with the technology profile

Using the Guidelines

If a technology profile is to be produced as a result of the company visit it is important that the IRC refers to the guidelines for completing a TOTR to ensure that all the relevant information is collected during the company visit. These guidelines are also available in the operational manual.

4.7 POST VISIT

A successful company visit will have turned a contact into a client. Enough information will have been collected to allow:

- A technology profile to be produced
- An assessment of whether the company would gain through working with the IRC network
- A TOTR to be submitted to the network and if an expression of interest results to be sufficiently knowledgeable of the company's position to make an assessment of the suitability of that EOI.
- Any future TOTRs or network activities to be matched to the company's needs or expertise.

Tracking: The IRC should ensure that the information collected during visit is entered into the IRC database. Annex 1 contains an example of a standard company visit report form.

4.8 OUTCOMES

The company visit will have four possible outcomes:

- The visit will paved the way from the IRC to provide services to the company (technology audit etc)
- The visit will allow the IRC to identify technology offers and needs and produce a TOTR / technology profile
- The company may not be ready to make use of the IRC network, however its details will be stored for future reference.
- The visit will confirm that the company will not benefit from using the IRC's services. If this is the case the IRC should try to signpost the company to more appropriate organisations.

4.9 FOLLOW-UP

All follow-up activities should be noted and delivered when agreed with the company. The IRC should contact the company 2 weeks after the meeting and at regular 3 monthly intervals from this time onwards, while the company remains interested in IRC services.

4.10 ANNEX 1: VISIT REPORT

Company Name
Contact Details Name Position Address
Telephone   Fax   www.xxxxxx   Email
Summary of Company Activities a. Number of Employees b. Approximate turnover c. Approximate % of turnover spent on R&D
Type of Profiles interested in receiving (IRC Codes)
Company Activities in detail General Description Products / Services and/or Technologies 1. 2. 3. Main Sectors or Markets (Approximate %) 1. 2. 3.
Interest in IRCs Services a. TOTR b. Technology Audit c. Technology Watch d. Brokerage Events e. Missions f. Information days g. Other
Description of Innovative Technologies a. Innovative Aspects b. Advantages c. Type of partner sought (what will be required of the partner etc.) d. Type of Agreement Sought
Description of Technology Requirements a. Innovative Aspects b. Advantages c. Type of partner sought (what will be required of the partner etc) d. Type of Agreement Sought

4.11 ANNEX 2: COMPANY & IRC COMMITMENT

1. Before becoming heavily involved with a client it is important that an IRC is convinced that the company is fully committed to the TTT process, that it understands the implications of becoming involved in the network and the obligations placed upon it. The company must be prepared to:

- Respond promptly to any enquiries whether from its local IRC, the transnational IRC or the match provided by the IRC
- Provide extra information to support the original technology profile
- Be prepared to talk with companies provided by the network if they match their needs
- Keep its local IRC informed of all negotiations and discussions that may develop from initial contacts supplied by the network

2. If possible the IRC should ask the company to sign a commitment agreement which will clearly outline what is expected of the company and in return what the company can expect from the IRC.

The following is an example of the type of agreement a company and IRC might sign.

I the undersigned, representative of company xxxxxxxxxx agree to respond promptly to any requests made by the IRC xxxxxxxxx relating to the promotion of product/technology/service xxxxxxxxxxxxxx or the search for technology solution relating to xxxxxxxxx through the IRC network. This may include a request for more detailed information, the serious assessment of company profiles provided by the IRC that match the requirements of company xxxxxxxxxxxxxx. Further, that if any addition discussions develop from the initial contact provided by IRC xxxxxx I shall keep the IRC informed.

In return IRC xxxxxxxxxx is committed to effectively promote company xxxxxxxxxxxxxx's product/technology/service or search for a technology solution through the IRC network. Specifically the IRC will assist with the production of a

- Technology profile
- Will promote this technology profile to the network
- Will screen and match any responses from the network to ensure that what company xxxxxxx receives is of use
- Will ensure that any matching companies are committed to the IRC process and are prepared to provide as much information as is required by company xxxxxxxxxxx.
- Will keep company xxxxxxxxxx regularly updated on the progress with the technology profile
- Will provide the necessary assistance (translations, location for meeting, etc.) for any negotiations that may result from the matching process
- Will provide the necessary assistance (travel arrangements, location for meeting translations etc.) if face-to-face negotiations result from the initial discussions
- Will provide advice and assistance with issues relating to contract negotiations, licensing, IPR etc. and any other services that are deemed appropriate by the IRC and the company.

5 A GUIDE TO TECHNOLOGY AUDITS

*Summary: This chapter will considered the delivery of technology audits. A **DEFINITION** of a technology audit is provided and the difference between a **COMPANY VISIT** & a **TECHNOLOGY AUDIT** is clarified.*   ***Mark Schneider***

5.1 INTRODUCTION

This document has been produced with the support of the Technology Audit Working Group. The document contains a broad definition of an IRC technology audit as well as a summary of the actions undertaken to complete an audit. Examples of technology audits developed by IRCs have been placed in the IRC document library under the section Technology Audits.

5.2 DEFINITIONS

Audit

An audit is simply a the systematic review of a company, its procedures and its performance (strengths and weaknesses). The information collected during an audit can then be used to develop concrete proposals for future actions. In essence the audit is about bringing information together to allow a company to see the big picture, something that it does not have the time or resources to do itself.

Technology Audit

The focus of a technology audit is the technological status of a company. For the IRC network an audit is generally used to identify innovative technologies, processes and expertise, as well as pinpointing areas of need, where innovative solutions are required. It's focus is such that it allows needs to be identified that can be met by the network, mainly through the exploitation or implementation of innovative technologies.

5.3 WHY UNDERTAKE A TECHNOLOGY AUDIT

Benefits for the IRC

The technology audit should be seen as a selfish exercise, a method of identify companies that an IRC can work with, that are open to innovation and will become clients.

Benefits for the Company

If successful the benefit of the audit to the company is clear, it will have an action plan leading to improved performance, whether the action plan is implemented with the support of IRC network or another more appropriate organisation.

Limits of a Technology Audit

It is important to realise that the completion of a technology audit and the delivery of an action plan does not mean that all the needs of a company will be met and there will be a successful outcome. A technology audit simply provides the structure within which a company is more likely to improve or fulfil its potential.

5.4 IS THE COMPANY COMMITTED?

For a technology audit to be of benefit it is essential that the company is committed to the process and collaborates closely with the IRC. Beyond this the company should have the capacity to adopt new technologies and the ability to be innovative.

5.5 A COMPANY VISIT AND A TECHNOLOGY AUDIT

Company visits and technology audits are superficially collecting the same type of information, however a technology audit should be regarded as a higher level service because:

- It is a far more detailed and time consuming
- It requires a high level of commitment from the client
- The activity must deliver results that will benefit the client

It should be regarded as a chargeable service, simply because of the time and effort committed to the process by the IRC. The chargeable element of the audit is yet another reason why the service must deliver some benefit to the company.

No technology audit without a company visit

Although it is important to make a clear differentiation between company visits and technology audits, it is also important not to try and separate the audit from the visit. An effective audit cannot be completed without a company visit having first been undertaken by the IRC. The company visit offers the most effective way to assess whether a company would benefit from the audit process. It also will give the audit some focus, issues or problems identified during the visit can then be investigated more fully during the audit. As the audit is both time consuming and consequently expensive, it is important that an IRC is highly selective when undertaking audits. The company visit also allows the IRC to collect basic company information that can be used to prepare for the audit. This information should include:

- Name of contact person for future correspondences
- Basic company details number of employees, date established, approximate turnover
- A description of what the company does, manufactures or the services it provides
- The processes the company uses
- The technology the company uses
- The company's products
- Is the company exporting?
- The markets or sectors it supplies or works in
- Is the company innovative?
- Would it benefit from using the IRC network
- Is the company interested in the network; would it be committed to the TTT process
- Is the company interested in being audited?

5.6 STRUCTURE OF THE TECHNOLOGY AUDIT

A standard technology audit does not exist. Similarly the length of time an IRC must commit to the technology audit will vary. However most technology audits have the same general structure and follow a pattern in terms of timescales :

Pre-visit / Preparatory Work (0.5 days)

The IRC should first research the company and the sectors in which it is active. The IRC should be aware of company's products, processes and markets. Most of this background information can be gathered from the company's own publicity material and website, if one is available. Information on the sector in which the company is active should also be gathered so that trends etc. can be considered when visiting the company.

Company Visit (1-1.5hrs)

The company visit allows the IRC to select those companies that would most benefit from a technology audit. In the majority of cases the company visit will demonstrate that there would be no merit in undertaking a technology audit. The company visit is normally conducted with the general manger or managing director of the company.

Pre-audit assessment (0.5 days)

Although the information collected during the company visit is general it still should be sufficient to allow a pre-assessment of the company to be made. The information can be used to make an assessment of some of the company problems, its needs, the technology or expertise it possesses etc. thereby ensuring that the audit has sufficient focus.

Technology Audit (1 day)

The technology audit is a wide ranging exercise and will involve more people than just the MD or GM of company. Section heads to shop floor employees can be included in the interview process. One of the

keystones of a technology audit is a SWOT analysis. This strength/weakness analysis is a self assessment by the company of its position within an impartial framework provided by the auditor. Essentially the analysis helps the company and the IRC to understand the history and the current market position of the company, including its successes and failures. As a result of establishing the company's position, the IRC can focus on defining the necessary innovations required and the technologies that could be exploited to improve the company's performance and market position. For more information on SWOT analysis see annex 1. The following are some of the aspects that a technology audit could consider.

- How the Company is Organised
- Existing Products & Markets
- Product mix / product life cycle analysis
- Level of Technology
- Technological resources / know how
- Market Position & Competitors
- Existence / analysis of marketing plan
- Strategy - market share / local - exports
- Competitors analysis / sector analysis / opportunities - threats
- Distribution networks - problems
- Use of information technologies
- Product Development
- Methodologies & procedures
- New products, time frames for development & introduction of products
- Research & Development
- resource allocation
- in house or external
- areas of interest
- sources of technology
- Innovation Capabilities
- Innovation successfully introduced, methodology
- Barriers to innovation
- Search for innovation, (technology watch)
- Quality control and standards
- Transnational cooperation
- With other companies
- With research organisations
- With Universities
- Participation in R&D programmes

Although there are a certain number of points that must be covered by the technology audit it is important that the collection of information is achieved through conversation and not a serious of questions. More information will be gathered if those being interviewed do not feet as if they are being interrogated Therefore a checklist should be produced to help guide the technology audit and ensure that no important areas are overlooked. Annex 2 contains a generic checklist.

Assessment & Action Plan (Up to 1 week)
The information and opinions collected are analysed and a report is produced for the company. The report should contain the following elements:
- Overview of company / activities
- Overview of sectors / markets
- Identification of strengths / weaknesses / opportunities / threats
- A provisional action plan: The action plan will be defined largely on the basis on the results of the SWOT analysis. The IRC in conjunction with the company will define what the technology targets or

Vision should be for the company. The IRC will then develop an action plan or **Road Map**; the strategy for reaching the target or vision defined. Clearly the action plan should focus as much as possible on the services the IRC can offer to help the company achieve its vision. The action plan should have a:

- A time frame
- Clear milestones
- An estimated budget
- List of expected deliverables
- Identification of potential problem solvers (technology or service providers)

Follow-up (dependant upon the action plan)

If the IRC can offer the majority of services to help a company reach its identified goal, then follow-up activity will be become a major part of the IRC's commitment to the company. The follow-up activity may for example include the widespread promotion of a innovative technology in a particular country, consequently a number of missions may have to be organised. As has already been stated the primary aim of the audit is to improve the performance of the audited company, however the underlying objective for the IRC is to turn a company into a client who will become a regular user of IRC services.

5.7 OUTCOMES

In terms of an IRC audit there should be one of two outcomes, the identification of:
- Technologies that could be transfer to other regions or markets in Europe
- Technologies, products, markets that could meet the needs of the company

Depending upon the level of the technology audit other outcomes could include:
- The development of structured plan for the sustainable growth of a company
- A detailed assessment of a company's technology portfolio and plan to exploit this potential resource.
- An identification of possible sources of funding, both national and European, for innovative technology development.
- Identification and signposting to sources of innovation financing including business angels or venture capitalists.
- The identification and signposting to other agencies and business support organisations for services or needs that cannot be matched by the IRC network.

5.8 COST OF A TECHNOLOGY AUDIT

As stated above one of key difference between a company visit and a technology audit is the cost. The actually cost of an audit is difficult to quantify as the daily rates of those undertaking audits vary across the network. However, assuming a figure of approximately 300 euro per day for an IRC generalist and 7 days to complete an audit, (this figure includes all background work, as well as the audit, assessment and development of an action plan) a figure of 2100 euro is arrived at. Clearly if a specialist or external expert is employed costs will be higher, a minimum of 3500 Euro assuming a daily rate of 500 Euro. A more detailed assessment for an INNOREGIO project suggested costs of between 2000 – 13500 Euro for audits ranging from 8 to 16 days in length (Kelessides 2000). To obtain a true indication of the cost of an audit it is also important to consider the time the company being audited must commit to the process, Kelessides has once again estimated this to be anywhere from 6.5-10 days.

It is clear that technology audits are expensive and time consuming for the IRC and the company. Therefore they should be undertaken sparingly and only then with companies that are deeply committed to the process.

5.9 WHO SHOULD UNDERTAKE A TECHNOLOGY AUDIT?

Internal Generalist
A member of IRC team with:
- An understanding of SMEs problems and needs
- Experience of the identification of innovative technologies
- Experience and an understanding of the problems of exploiting innovative technologies
- Experience and an understanding of the problems of integrating new technologies
- Knowledge and practical experience of the audit tool
- Knowledge of business support networks
- Knowledge of sources of technologies (universities, R&D facilities etc)
- Some commercial or industrial experience

Positives
An internal generalist has sector flexibility, is cheap and will bring an entirely IRC focus to the audit.

Negatives
The negative aspects relate to the lack of sector expertise and experience of undertaking technology audits, both raise the issue of creditability with the company. Also a generalist may not be able to provide the depth required to give the audit added value. It is important for a technology audit to offer something more than a company visit, to ensure this the IRC generalist must have some training and practical experience of technology auditing.

External Generalist
A consultant employed by the IRC with a:
- Detailed knowledge of a technology audit tool
- Detailed knowledge of SME problems, needs, markets and trends
- Knowledge of business support networks
- Knowledge of sources of technologies (universities, R&D facilities etc)
- Knowledge of the IRC network

Positives
The main benefit of the generalist is flexibility, an ability to provide a service to all of the IRC's diverse client base. In terms of cost the generalist is also likely to be less expensive than the specialist. As a recognised expert in the field of audits the generalist will, like the specialist, be able to gain the confidence of the company more quickly.

Negatives
The points against the generalist are the same as those identified for the specialist, the cost implications and lack of control over the audit process. Once again this latter problem can be avoided if the consultant is made aware of the objectives of the IRC network. The added difficulty is the lack of detailed understanding of a sector that a generalist can be bring to an audit. Consequently the audit is likely to be less specific and of less value to the company than one undertaken by a specialist.

External Specialist
A consultant employed by the IRC with:
- Specific knowledge and experience of the sector in which the audited company is active
- The experience to identify in a detailed way the problems or needs of a company
- The expertise to offer solutions to these problems
- The ability to identify new markets and opportunities for technology transfer
- A business and R&D orientated background

Positives
In an ideal world a technology audit would always be performed by an individual with experience of the sector in which the company is active. Less time would be required to understand processes or

manufacturing techniques. A specialist would far more likely to identify the needs or innovations in a company and the solutions and marketing strategies that could be employed to ensure success for the company. On the basis that the auditor has expertise, creditability would also be given to the audit process making the company more open and at ease.

Negatives

Unfortunately in the real world an IRC provides services to companies from all sectors. Therefore it would be impractical for a different external specialist to be hired for each sector. Clearly, there would also be major cost implications if this approach were adopted. If an IRC were undertaking a series of same sector based audits then it might be feasible to hire a specialist. The other major concern from the IRC point of view is the development and delivery of an action plan. As one of the main reasons for undertaking the audit is, where appropriate, to help identify services that the IRC can delivery for the company, it is important that the IRC has a role to play in the action plan. With a consultant employed the audit will not necessarily focus on the issues that are of interest to the IRC making it less likely that the company being audited will become a IRC customer. This problem can be avoided if the specialist is sufficiently briefed by the IRC.

Who should perform the technology audit?

The choice of the person to deliver the audit will finally depend upon the complexity and depth of audit required. For example, if the aim of the audit is to deliver an action plan that will develop company strategy for the next 2 years, (identifying which markets they should be in, where R&D should be directed, with whom they should be working etc.), then only a external specialist will be able to deliver. If however the company is happy with an audit that delivers an action plan that helps identify innovative technologies and locates partners to exploit these technologies in Europe, then trained IRC staff will be able to deliver the audit.

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References

Brown, D., Innovation Management Tools: A review of selected methodologies, EIMS Project No 94/135, European Commission 1996.

Kelessidis, K., Technology Audit, INNOREGIO: dissemination of innovation and knowledge management techniques, 2000.

5.10 ANNEX 1: SWOT ANALYSIS

To conduct a SWOT analysis, draw a vertical line in the centre of a sheet of paper or flipchart, intersected by a horizontal line, the quadrants can then be used to assess a company's situation.

STRENGTHS	WEAKNESSES
OPPORTUNITIES	THREATS

To ensure that a company gets the most of the SWOT analysis the following points should be considered:

- Though a great deal of research may lie behind what's in each box, the key to success lies in keeping it simple and incisive
- Simply bringing the information together will allow the company to see the big picture
- Use the SWOT analysis as a brainstorming exercise
- Strengths and weaknesses refers to a internal strengths and weaknesses
- Opportunities and threats refers to external opportunities and threats
- A SWOT analysis is only a snapshot of the company at the time of the analysis, it is not a permanent document.

Strengths

In the first box list all the strengths that a company possesses. It is important to consider strengths from of the point of view of the company as well as from the point of view of those that work with the company. The type of questions that should be asked include:

- What technical advantages do you have only your competitors?
- What does your company do well?
- Where are you placed in your industrial sector
- What are to best selling products & Services and why?

Weaknesses

In the second box list weaknesses, again this should be considered from an internal and external basis - do other people perceive weaknesses that you do not see? Do your competitors do better in certain areas? Other questions that could be asked include:

- What could be improved?
- What is done badly?
- What should be avoided?
- What are weakest products and services and why?

Opportunities

The third box is for opportunities. When you look at the market, what do you see? Look for gaps but be aware that gaps may not last long. What is identified as an opportunity today may not exist in three months. Useful opportunities can come from such things as:

- Changes in technology and markets on both a broad and narrow scale
- Availability of new materials
- New uses for old products
- Changes in government policy in the sector in which the company works
- Changes in social patterns, population profiles, lifestyle changes, etc.
- The type of questions that should be asked include:
- Where are the market opportunities?
- What are the interesting trends?

- What are competitors not doing that customers need?

Threats

The final box is to list threats to your business.
- What trends do you see that could wipe the company out or make services or product obsolete?
- What are competitors doing?
- What obstacles does the company face i.e. a change in legislation?
- Are the required specifications for the company's products or services changing?
- Is changing technology threatening the company's position?

Here's a fictional example of how a SWOT Analysis might look for a greeting card site specialising in pictures of slugs, snails and insects.

Strengths	Weaknesses
Unique idea Strong artistic Excellent animation abilities Source of inspirational card inscriptions for all occasions Experienced and innovative employees.	Small customer list, most site users seek to remain anonymous Few advertisers interested in this strangely targeted market Lack of interest from venture capitalists. Single stream of revenue is advertising.
Opportunities	Threats
No real competitors Much traffic from students at City University (A Slug is their mascot) sending cards to each other. Possible joint venture with alumni association Seek advertising from French restaurants and their suppliers. Possible books sales such as: Slugs and Snails the low maintenance pet and The Gourmet Guide to Edible Insects. E-commerce venture selling scarab jewellery Possible advertisers among pet supply and fish supply stores Possible affiliate program with snail bait companies Possible cross promotion with Conchologists of Europe	Chemical companies are producing more effective snail bait that may destroy gastropod populations in our lifetime. Large card sites such as Blue Mountain (http://www.bluemountain.com) might want to take over the slug and mollusc traffic taking over the market

Obviously the company has some problems mainly a lack of revenue sources. However, the SWOT analysis has at least allowed the identification of alternatives, thereby achieving its purpose. Ultimately one of the ideas identified may revolutionise the snail and slug card business, as we know it.

5.11 ANNEX 2 TECHNOLOGY AUDIT CHECKLIST

AREAS TO CONSIDER	YES
How the Company is Organised	
Existing Products & Markets	
Product mix / product life cycle analysis	
Level of Technology	
Technological resources / know how	
Market Position & Competitors	
Existence / analysis of marketing plan	
Strategy - market share / local - exports	
Competitors analysis / sector analysis / opportunities - threats	
Distribution networks – problems	
Use of information technologies	
Product Development	
Methodologies & procedures	
New products,	
Time frames for development & introduction of products	
Research & Development	
resource allocation	
in house or external	
areas of interest	
sources of technology	
Innovation Capabilities	
Innovation successfully introduced, methodology	
Barriers to innovation	
Search for innovation, (technology watch)	
Quality control and standards	
Transnational cooperation	
a. With other companies	
With research organisations	
With Universities	
Participation in R&D programmes	

6 PREPARING TECHNOLOGY OFFERS AND TECHNOLOGY REQUESTS

Produced with the Support of:
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Alex Smeets IRC East of England;
David Reynolds IRC East of England;

Summary: This chapter offers advice and guidance for the production of good quality technology offers and requests. Although the guidelines are principally directed at the BBS, they should also be used to help produce technology offers and requests for brokerage event and missions.

6.1 WHAT ARE THESE GUIDELINES FOR?

The aim of these Guidelines are to help you write better Technology Offers and Technology Requests (TOs & TRs). They are not mandatory, since each TO and TR is, or should be, unique and it may sometimes be sensible to ignore parts of the Guidelines. In most cases, however, respecting the Guidelines will result in clearly written TOs & TRs, easily understood by your IRC colleagues and their clients. You should therefore enjoy more success with your BBS entries.

6.2 BEFORE YOU START WRITING

"Time spent on reconnaissance is never wasted" is an old military saying which can be adapted to many fields. To prepare good quality TOs & TRs you will find it useful to visit your client to discover the background to the proposed TO or TR and to assess the level of the client's commitment. Questions you might ask are:

- Is the technology truly novel or is it existing technology applied in a novel way?
- If you have a prototype, has it been tested in the laboratory or in the field?
- What kind of partner are you seeking? Industrial, academic, financial?
- What do you want your partner to do? More research, manufacture under licence, joint venture, provide finance?
- What resources (people, time, money) will you commit to the project?
- What difference will it make to you if the TO/TR fails?

You will be able to think of other relevant questions, but your aim is to create a complete picture of the TO or TR and your client's ambitions and abilities. For additional information, you should refer to the section on visiting companies in the IRC Operational Manual. When you meet an entrepreneur, ask for access to his promotion material (brochure, website, etc) and if possible to his patents. You might also find it useful to use an Internet search engine (**www.google.com**, **www.altavista.com**, **http://www.alltheweb.com/**), to assess the likely competition to your TO or TR and more clearly to identify its innovative aspects and main advantages.

6.3 HOW TO WRITE GOOD TECHNOLOGY OFFERS AND REQUESTS

Preparing good TOs & TRs requires practice, but there are some simple rules you can follow to help get your message across.

Who will read the profile?

Imagine you are talking to an IRC colleague or a foreign client who might be interested in your TO or TR and try and replicate the language you would use.

Use Everyday English

Keep technical terms to a minimum and only use them in the Description/ Special features box when you think it would help a subject expert to understand the technology.

Concision

Use short sentences and where possible try to stick to one main idea in a sentence. Cut out unnecessary words, "The running costs of each unit are reduced." not "The running costs are reduced in respect of each and every unit."

Clear Title

Make the title of your TO or TR clear and uncomplicated, remember that readers often use the title to decide if the TO or TR is worth reading.

Avoid Jargon

Never assume that what is clear to you will clear to someone with no experience of a particular sector. Explain acronyms e.g. BBS (Bulletin Board Service); TOs & TRs (Technology Offers and Technology Requests).

Cutting & Pasting

Avoid cutting and pasting sections of text from other publications. If you want to use information from a Patent, remember to change the style and use simpler words.

Reading

Read your TO or TR before submitting it to the BBS. Check that it is accurate, clear, concise and readable. Alternatively, ask a colleague to read it for you. If possible ask an English student or a native English speaker to also read it and suggest improvements.

Abstract

Always write the abstract last. It should be a concise summary of the TO or TR. Avoid repeating the first paragraph of the Description/ Special features box, but be sure to include all the relevant points. Respect the 500 characters limit for the Abstract. If you exceed it, your TO or TR will be rejected; if you write too little you will not do justice to your TO or TR.

6.4 SOURCES OF ADDITIONAL HELP

For general guidance on using plain English you should look at the website of the Plain English Campaign (www.plainenglish.co.uk). This organisation defines plain English as "something that the intended audience can read, understand and act upon the first time they read it. Plain English takes into account design and layout as well as language." The standard guide of the intricacies of the English language is *The Complete Plain Words*, a book first written in 1954 by Sir Ernest Gowers and revised by Sidney Greenbaum and Janet Whitcut in 1987, Penguin ISBN 0-14-051199-7.

6.5 GENERAL NOTES

Partner requests (Technology Offers and Technology Requests) are entered into the Innovation Relay Centre Network database, and an e-mail version is sent to all IRC Network members (or a geographical sub-set if desired). It is important to realise that the initial recipients are highly unlikely to be experts in the field covered by the partner request. It is not their job to carry out any serious technical or commercial assessment, but to pass the information on to potentially interested parties in their regions. It is vital, therefore, that the information you present in the title and abstract can be understood by a "generalist", and gives a clear indication as to who might be interested in the information. Information presented in the "description" part can then be a bit more in-depth and should in fact be sufficiently detailed to arouse interest in prospective collaboration partners.

6.6 PRODUCING A TECHNOLOGY OFFER

TECHNOLOGY OFFER PROFILE (TO)

TECHNOLOGY DESCRIPTION

Title

The title should be clear and meaningful to a person who is not an expert in the technology or application field, and should enable them to form a picture of the companies or researchers in their region that might be appropriate partners.

Abstract

Please give a brief description of the technology (< 500 characters)

The abstract for a TO should answer the following questions:

- Where (geographically) is it from?
- What sort of organisation is offering it?
- What is being offered?
- What can it be used for?
- What are the main advantages?
- What sort of deal is sought?

The following example illustrates a format for a Technology Offer that usually works well:

"A small German company has developed a fibre optic oxygen sensor based on an opto-electronic measuring device suitable for use as a transducer for biosensors. Advantages over conventional electrodes include its small size, zero oxygen consumption during measurement, high sensitivity at low oxygen concentrations and lack of interference by electric or magnetic fields. The company is looking for industrial partners interested in further development and in research institutes and companies for testing of new applications."

Description/ Special features. Please give a description of the relevant results or characteristics of the offer.

- When ever possible, provide background information or a short introductory text to the technology described (usually this can be found through an internet search).
- Describe the technology or product, try to indicate clearly the innovation you propose (provide quantitative data if possible).
- Clearly establish the potential application of the technology, perhaps considering more than one field.
- Provide information about the expertise or know-how of the proposer.
- Do not include sales promotion of your technology or product
- Do not include advantages of your technology or product, this will come below
- Provide a picture or drawing if one is available.

Innovative Aspects of the Offer

Describe clearly the innovative aspects of the technology. Avoid generalities such as best or unique, but try to specify innovation by comparison with prevailing technologies.

Main advantages of the Offer

Give the main economic advantages / benefits of the technology (if possible in a quantitative way), regarding such elements as performance, ease of use, need of specific know-how, or expertise to adopt your technology.

Technology Key words

Choose as many keywords as are applicable to the technology or the application.
Try to use level 3 keywords, as these are the most specific.
Be aware that a search may be conducted using keywords alone.

Current stage of development of the offered / required technology
☐ Development phase – laboratory tested
☐ Available for demonstration – field tested   ☐ Already on the market
Comments:

Intellectual Property Rights *(for offers only)*
☐   patent applied for* ☐   patents granted *
☐   copyright protected ☐   exclusive rights *
☐   secret know-how   ☐   others (registered design, plant variety right, etc)*
It the patent applied for is ticked, you must list the countries in which you have applied for patents in the Comments Box.
If the patents granted box is ticked, you <u>must</u> enter the countries that have granted the patents in the Comments Box.
If either the patent granted box or the exclusive rights box is ticked you <u>must</u> indicate where the initial patent was granted and say a few words about the company.
Whenever possible, you should indicate the year a patent was granted and its reference number, although if the client does not want to disclose this information you should respect his wishes. Finally, if the others box is ticked you must explain what this means.
Comments:

Copyright
Copyright gives rights to the creators of certain kinds of material to control the various ways in which their material may be exploited. The rights broadly cover: copying; adapting; issuing; renting and lending copies to the public; performing in public; and broadcasting. It is an **unregistered right** (unlike patents, registered designs or trademarks). So, **there is no official action to take**, (no application to make, forms to fill in, or fees to pay). Copyright comes into effect immediately, as soon as something that can be protected is created and "fixed" in some way, eg on paper, on film, via sound recording, as an electronic record on the internet, etc.
You should note that **copyright does not protect ideas**. It protects the way the idea is expressed in a piece of work, but it does not protect the idea itself.

Patent granted
A patent for an invention is granted by government to the inventor, giving the inventor the right for a limited period to stop others from making, using or selling the invention without the permission of the inventor. When a patent is granted, the invention becomes the property of the inventor, which - like any other form of property or business asset - can be bought, sold, rented or hired.
Exclusive rights (licence)
The exclusive rights' licence granted by the owner of a patent allows only one party to use the invention protected by the patent. With such a licence, the owner himself cannot then use his invention, but he can collect royalties on the use of his patent. A patent owner may indicate (via the Office) that licences under his patent are available as of right to anyone who asks for one on reasonable terms. The owner is then allowed to pay half the usual renewal fees on his patent.

More information about IPR terms: http://www.patent.gov.uk/patent/glossary/index.htm

Organisation/Company submitting Technology Offer

Type	☐ Industry		☐ Technical Centre / Technology transfer
centre			
	☐ Research institute /University		☐ Services
	☐ Other: please specify*		

*Comments:

Size of Organisation submitting Technology Offer *(please tick one box)*
☐ < 10 employees ☐ 11-50 employees ☐ 50-250 employees ☐ 250-500 employees
☐ > 500 employees

3. APPLICATION DOMAINS

Market Applications Highlights *(less than 250 characters)*

4. COLLABORATION DETAILS

Type of collaboration sought (more than one option can be selected)
☐ Technical co-operation ☐ Commercial agreement with technical assistance
☐ Joint Venture agreement ☐ Licence agreement
☐ Manufacturing agreement ☐ Financial resources

Comments: Partners contribution - Role and profile of the partners and tasks to be performed (Mandatory)
Indicate clearly the
type of partner sought (such as: industry, academy, research organisation)
the specific area of activity of the partner (example: manufacturer of plastic packages, distributor of plastic packages, user of plastic packages, disposal of plastic packages, etc.),
the tasks to be performed of the partner sought and if relevant **its size**.

The more focused the definition, the higher the chances of finding the partner.

6.7 PRODUCING A TECHNOLOGY REQUEST

TECHNOLOGY REQUEST PROFILE (TR)

TECHNOLOGY DESCRIPTION

Title
The title should clearly identify the technology and the application and be meaningful to a person who is not an expert, and should enable him/her to form a picture of the companies or researchers in their region that might be appropriate partners.

Abstract Please give a brief description of the technology (< 500 characters)

The abstract for a TR should answer the following questions:
Where (geographically) is it from?
What kind of organisation is looking for the technology?
What technology are they looking for?
What will the technology be used for?
What stage of development should the technology be at?

For a Technology Request, the abstract should be along the following lines:
"A French company is looking for a technology to detect fruit stone residues left behind after the removal of stones from fruit. Ideally, the detection system should have a treatment capacity of 1 to 2 tonnes per hour (100,000 to 200,000 fruit per hour), although 0.5 tonnes per hour would be acceptable. The size of the stone residues ranges between 0.5 and 5 mm. The technology requested can either be at the laboratory stage or fully developed."

Description/ Special features. Please give a description of the characteristics of the request.
It would be useful to identify the current activities of the company.
A technology request may arise in two kinds of situation :
Your client wants to improve his process or an existing product or needs some help for the development of a new product. The product and/or processes should be briefly described and the targeted prices and production throughput should be given.
- **Why does this company want to improve a current process or product?**
- **What is the current technical problem to be solved, what process to be improved and why?**
- **What are the technologies the company believes could be suitable?**
Are there some specific requirements to take into consideration (temperature, pressure, size, etc)?

Your client wants to broaden the range of his products or services. In this case, a short description of the client's production facilities and of his marketing department and commercial skills would be useful.
- **Include a description of the problem to be solved or technology requested**
- **Provide information about the current process / product to improve**
- **Clearly specify the technical requirements**
- **Provide a picture or drawing if one is available.**

2. Technology Key words

Choose as many keywords as are applicable to the technology or the application,
Try to use level 3 keywords as these are the most specific;
Be aware that a search may be conducted using keywords alone.

Current stage of development of the required technology
☐ Development phase – laboratory tested
☐ Available for demonstration – field tested   ☐ Already on the market
Comments:

Organisation/Company submitting Technology Request

Type ☐ Industry ☐ Technical Centre / Technology transfer centre ☐ Research institute /University ☐ Services ☐ Other: please specify*
*Comments:

Size of Organisation submitting Technology Request *(please tick one box)*
☐ < 10 employees ☐ 11-50 employees ☐ 50-250 employees ☐ 250-500 employees
☐ > 500 employees

3. APPLICATION DOMAINS

Market Applications Highlights *(less than 250 characters)*

4. COLLABORATION DETAILS

Type of collaboration sought (more than one option can be selected)
☐ Technical co-operation ☐ Commercial agreement with technical assistance
☐ Joint Venture agreement ☐ Licence agreement
☐ Manufacturing agreement ☐ Financial resources

Comments: Partners contribution - Role and profile of the partners and tasks to be performed (Mandatory) Indicate clearly the

type of partner sought (such as: industry, academy, research organisation),
the specific area of activity of the partner (example: manufacturer of plastic packages, distributor of plastic packages, user of plastic packages, disposal of plastic packages, etc.),
the tasks to be performed of the partner sought and if relevant **its size**.

The more focused is the definition, the higher the chances of finding the partner.

6.8 ANNEX 1: AN EXAMPLE OF A GOOD TECHNOLOGY OFFER

Biodegradable nets and net bags offering highest strength due to innovative weaving process (Double-Twist Technology)

Abstract: An Austrian SME in the packaging sector has developed a new environmentally friendly weaving process for the production of netting textiles with a high tensile strength and considerably less expenditure of material. Presently the process is used for the production of packaging nets. Partners from the textile and packaging industry are being sought for the development of further applications and to exploit the existing know-how (License agreements)

Description: This weaving process for biodegradable nets and net bags can be used for the production of any sort of textile. The use of natural materials (cotton, cellulose, flax, hemp) and the additional tensile strength provided by the employment of the Double-Twist Technology give the new textile with a broad spectrum of uses:
Packaging nets: Tubular netting, net bags, anti-theft nets, nets to cover pallets
Nets for use in the agricultural sector: Early-ripening nets, straw-ball-nets, hail-protection nets, nets for protection against birds, nets for climbing plants, tree-protection nets
Nets for use for work on buildings
Transport protection nets
Technical nets (e.g. as reinforcement for paper, hard cartons or homogenous lamina) Underlying basis for plastering Fishing nets

Today practically only plastic sacks are used. The demand and the requirement for this World Novelty is enormous.

About 30 years ago, production of HDPE Raschel Netbags was begun with the aim of packaging fruit and vegetables so that they could be seen inside the packaging. The manufacture of these bags (knitting process) often led to "stocking-ladder" holes, involving uncontrolled loss of contents, stoppages in the filling machines and losses of product contents during transport to the consumer. Also, this type of bag production involved a 25% wastage loss. The new weaving process allows the production of multi-layer textile and thus the manufacture of net bags in a single working phase. "Stocking-ladder" holes cannot occur in completed bags, only a few threads in individual bags can be damaged, but not the whole roll. Thus, in production, the wastage rate ("natural" waste) is 10% at most. The current process for the manufacture of textiles from natural threads / Bio Net Bags is described in 3 patents:
Double-Twist Technology: In this completely new weaving process each thread of the textile is twisted twice round all the other threads. In this way is achieved either, with the same amount of raw material used, considerably greater degree of tensile strength or, with the same degree of tensile strength a saving of raw material used of up to 40% (for comparable sheet weight). Reversal of Weave at the edges of the textile, to improve stability of the shape and the optical impression of the net bags.
Built-in Loops: In this way, the net bags are produced in rolls making them also suitable for use in automatic filling machines (Automatic bags).

With the use of flax, hemp, cotton or cellulose (self-regenerative raw materials), valuable mineral oil resources are not expended and moreover, the net bags can be composted after use. Natural fibres are humidity regulating and allow natural breathing. The product therefore remains demonstrably fresh for a longer time. Flax and hemp have a natural resistance to mould, insects and mice. They also provide a natural environment in which the premature sprouting of potatoes and onions is retarded. The increased demand for biological foodstuffs by the consumer results in a growing market for biogenic packaging because this makes the product more attractive at the POS. In 2000 the Bio Net Bags were nominated at the award of the Austrian State Prize for exemplary packaging and in 2001 received the Austrian Eco-Design-Prize.

Innovative Aspects:

Bags for use in automatic machines can be provided as well as individual bags, with or without drawstrings. Those new Bio Net Bags can be used in all current automatic filling machines. And in contrast with synthetic bags produced in the traditional knitting process, it is not possible for ladders to appear through which some of the product can be lost. Thus stoppages of automatic machines, loss of product and unnecessary rejection can be avoided. In contrast to current plastic bags with incorporated lamina bands, the net bags made from natural fibres have no sharp cutting edges. The contents are therefore better protected against damage and the package is easier for the consumer to handle. The Bio Net Bags can be disposed of after use directly into the bio waste container for composting – thus protecting the environment.

Main Advantages:

The Bio Net Bags can be produced in any colour desired, or multicoloured (up to six different yarn colours). The colours are of course only those suitable for use with foodstuffs.

The Bio Net Bags can meet individual customer requirements ranging from broad-mesh to opaque. It is also possible to incorporate varying weaves in any one type of sack and items such as a transparent window so that the product can be seen.

Firm logos and texts can now be directly incorporated into the weave. (Previously these were achieved only by means of a banderole.)

Taking into account the costs of the disposal of plastic, price approaches that for plastic bags.

Technology Keywords:	Packaging / Handling
	Plastics, Rubber, Polymers and Composite Materials
	Textiles Technology
	Food Packaging / Handling
Current Stage of Development:	Already on the market
Exploitation of RTD Results:	PRIVATE RESEARCH
Intellectual Property Rights:	Patent(s) granted

Comments
European patent registration and PCT

Organisation/Company Type:	Industry
Organisation/Company Size:	<50
Brief Market Application Codes:	Fisheries, resources of the sea
	Food - Agro Industry
	Industrial manufacture
	Materials technology
	Comments

Detailed Market Application Codes Keywords
(VEIC):
    General food products
    Garden and horticultural products
    Other Consumer Related (not elsewhere classified)
    Processes for working with plastics
    Other industrial process machinery for textile, paper and other industries
    Textiles (synthetic and natural)
    Packing products and systems
    Agriculture, Forestry, Fishing, Animal Husbandry and Related Products
    Manufacture of building materials
    Distribution of building products and systems
    Highlights

Collaboration Type:

Net-bags produced in rolls to make them also suitable for use in automatic filling machines (Automatic bags)
Technical Co-operation
Licence agreement
Manufacturing agreement (Subcontrating & Co-contracting)

Comments
License Agreement: Exploitation of the technology all over Europe Technical Co-operation: Development and adoption of further   applications
Manufacturing   Agreement:
Contracting for production and distribution of net bags.

Preferred Countries for diffusion: ALL

Other examples: please have a look at the
TO ref. EETO01 013 - A novel non-invasive device to accurately detect and monitor refrigerant gas leakage - IRC East of England
TO ref.: out118 – Innovative Anti-theft Alarm and Immobiliser for Motorcycles - IRC Midlands (UK)

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6.9 ANNEX 2 AN EXAMPLE OF A GOOD TECHNOLOGY REQUEST

Lubrication technology to reduce tool wear and improve line speed of fine steel wire drawing

Abstract: A leading supplier of welding consumables is seeking continuously working lubrication technologies. These should reduce tool wear and improve line speed by applying consistent lubricant films during the wire drawing process of its cored-wire products. Possible application technologies – either prototype or production – could include spray, brush and electrostatic. The company is looking for a license, equipment with technical support or partners with suitable technology for joint exploitation.

Description: In welding consumables, metal-cored wire is a cross between solid wire and flux-cored wire. The wire is made by forming a strip of metal into a trough, and the core inserted by adding a metal powder formulation using a controlled waterfall technique. The metal strip is then closed, and the wire diameter is reduced by drawing to the correct size through a series of carbide surfaced roller die. The final process involves a diamond die to remove the square section and produce a round wire.

Lubrication improves drawability, and reduces the required drawing force, wear on the die, and surface temperature on the die and on the wire. The current lubrication technology is based on the use of soaps - the alkali-salts and the ground-alkali-salts of higher molecular fatty acids – and is applied by drawing the steel wire through solid blocks of this material at various stages of the drawing cycle. This technology prevents the lubricant from entering the core of the wire through the mechanical gap in the steel outer casing, and enables Stage 1 line speeds of around 120m/min. However it is messy, limits line speeds and requires baking at the end of the process to remove the residues, which would otherwise introduce hydrogen contamination.

The company is looking for partners with appropriate lubrication technologies that could be incorporated into both existing and new process lines. The technologies should be proven, applicable and available at a reasonable cost.

Technical Specifications / Specific technical requirements:
The ideal lubrication technology should:
Be suitable for steel strip being formed first into a trough and then into a 4mm diameter cored wire that is drawn down in stages to approx. 1.2mm
Ensure lubricant does not enter the mechanical 'gap' in the outer steel jacket of the wire, especially in the early stages of the drawing process
Optimise the application of lubricant
Reduce die and tool wear
Help improve Stage 1 line speed to 180m/min
Remove the need for batch baking of finished product or enable baking to be carried out online

Technology Keywords:	Industrial Engineering / Processes / Manufacturing Techniques
Organisation/Company Type:	Industry
Organisation/Company Size:	250-500
Brief Market Application Codes:	Industrial manufacture
	Comments: Manufacture of cored steel wire drawing.

7 THE IRC QUALITY CHARTER & MISSION STATEMENT

Produce with the support of:
David Reynolds, IRC East of England

Summary: *We strive to be the premier transnational technology transfer network in Europe for Small and Medium-sized Enterprises. The IRC network should be Professional, Responsive, Informative, Dependable and Encouraging (PRIDE)* **Marie Magali Sarry**

7.1 INTRODUCTION

To establish itself as the Network of Excellence, the IRC Network has adopted a **Global Quality Policy**, which combines:

- The Quality Management System (QMS)
- The Performance Indicators (PI)
- The **Quality Charter**

The Quality Charter has been designed by the "Codes of Conduct" Working Group, chaired by Dr David Reynolds from IRC East of England. It has been presented and warmly welcomed at the 7th IRC Annual Meeting held in Nuremberg, in November 2002. The Quality Charter is made up of four elements:

- A Mission Statement
- Core Values
- Codes of Conduct
- The practical implementation of the Codes of Conduct

According to the 'Benchmarking Implementation Report':

"*The first contact with the company is crucial for a successful first impression and subsequent company visits. Since SMEs might not be aware of IRC activities and services it is of paramount importance for the IRC to be able to communicate in a clear and concise manner its mission, service offer and competencies, as well as convince the firm of the usefulness of their service.*"

This professional approach lies at the heart of our Quality Charter, which is a statement of the values and business practices of our network towards all stakeholders. Let's be even more concrete and take the definition of Dr David Reynolds: "*Imagine building a house. The Mission Statement provides the plan. The Values determine the foundations and basic structure of the building. The Codes of Conduct determine the way individual rooms are laid out within the house. Because of their fundamental nature an organisation's Values are rarely changed. However, Codes of Conduct can be changed as and when appropriate.*"

Each member of our network should adopt, on a voluntary basis, the IRC Network Quality Charter. Through its acceptance, the IRC Network will ensure that its staff shares the same important values and will create among its members an "Esprit de Corps".

> *Definitions:*
> (***Global Quality Policy*** *= QMS + PI + Quality Charter*)
> (***Quality Charter*** *= Mission Statement + Core Values + Codes of Conduct + Practical Implementation of the Codes of Conduct*)

7.2 OUR MISSION STATEMENT

"We strive to be the premier transnational technology transfer network in Europe for Small and Medium-sized Enterprises."

7.3 OUR CORE VALUES: PRIDE

The IRC Network Core Values:

- Fuel our mission to the be the premier transnational technology transfer network in Europe for Small and Medium-sized Enterprises,
- Lay the groundwork for the lasting relationships we cultivate with clients and partners,
- Are the quality we seek and encourage in the people who work within the IRC Network.

The strength of our network is founded on five fundamental values, which form the word PRIDE.

We take **PRIDE** in all we do. We aspire to be

Professional

Responsive

Informative

Dependable

Encouraging

Professional

We aspire to be a network of professionals. We are people who have a broad knowledge of technology, technology transfer and business. We follow best practice standards in all our dealings with both network partners and clients. We will use every opportunity to build the network, embrace best practice, and encourage the support of IRC colleagues as we apply our knowledge to help achieve successful transnational technology transfer.

Responsive

We aspire to evaluate promptly all technology matches/responses even when the answer is no! We will respond to every communication from other IRC Network members courteously and do our best to help whenever we can.

Informative

We aspire to keep our network partners well informed of the status of any leads, contacts and negotiations and when there are delays with our client.

Dependable

We aspire to build trust amongst network members through our behaviour and responsiveness. Our network partners will be able to depend on us because we keep our promises.

Encouraging

We aspire to carry out our work with enthusiasm and appreciation. We will not take things for granted. We will champion the IRC network and make it not just the largest TT network but also the Network of Excellence in terms of quality in the delivery of our services!

7.4 OUR CODE OF CONDUCT

The adoption of Codes of Conduct is increasingly becoming recognised as a key means to increasing transparency. Codes of Conduct are important to set the tone for all employees and to indicate to third parties the standard to be expected from the IRC Network.

IRC to CLIENT

Building … **Value** and **Credibility**
- ◆ *Recruit motivated and suitable clients*
- ◆ *Offer realistic services*
- ◆ *Deliver on promises*
- ◆ *Be professional: serious, responsive and committed*

IRC to IRC

Building … **Trust** & **Enthusiasm**
- ◆ *Reply promptly*
- ◆ *Provide complete and correct information*
- ◆ *Maintain up-to-date status*

IRC to CU

Building … **Effectiveness** and **efficiency**
- ◆ *Build Excellence*
- ◆ *Contribute to the continuous development of Excellence in the network*
- ◆ *Provide complete and correct information on time*
- ◆ *Share Best Practices*

7.5 PRACTICAL IMPLEMENTATION OF THE CODES OF CONDUCT

The documents to be elaborated for the practical implementation of the Codes of Conduct should help standardise and professionalise the way we work as a network and also the range of services we offer our clients. These documents could cover the following areas:
- Agreements
- Client recruitment
- Company visits
- Expression of Interest
- Innovation financing
- Mentoring initiative
- Monitoring, managing and reporting effectively on own performance
- Staff exchange
- Technology audits
- TTT Event
- Technology Offers/Technology Requests

7.6 BAD PRACTICES

We should eliminate the following Bad Practices from the network, as such behavior is unacceptable in a Network of Excellence (non-exhaustive list):
- Offering unrealistic services to clients
- Not responding to a specific email from an IRC colleague
- Not providing the full information required when responding to a Technology Request or Technology Offer
- Asking for more information without being specific
- Not making time for your clients and partners

- Cancelling event participation without notice
- Operating independently: pursuing your own objectives at the expense of the rest of the network

7.7 IMPLEMENTATION OF THE QUALITY CHARTER

Once we have agreed on the content and on every detail of the Quality Charter, its implementation will be the next step. This subject has to be tackled in the discussion forum at the following web address: http://www.ircnet.lu/src/forum/listmessages.cfm?topic=65. At this stage, we can only make a few proposals…

To ensure that the Quality Charter becomes an integral part of the network, it may be appropriate for IRC members of staff to endorse the charter by formally agreeing to abide by it. They could, for example, sign a Quality Charter agreement. We could add in the "Who's Who" section of the IRC website an indication specifying whether the IRCs decided to comply with the Quality Charter. We eventually hope to link the Codes of Conduct to a quality mark.

Concerning the Quality Charter promotion, the Mission Statement, the Values and the Codes of Conduct could also appear – together or alone - on IRC Websites and on certain promotional materials. The Quality Charter could also be introduced at induction workshops. The Central Unit could use some promotional channels in order to publicise the IRCs new Quality Charter.
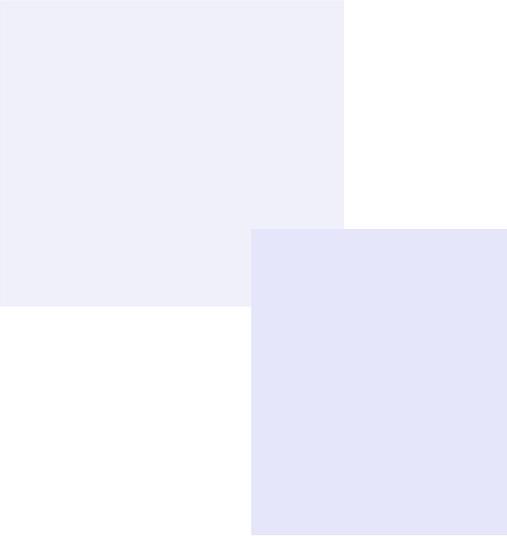
8 PRATICAL IMPLEMENTATION OF THE CODE OF CONDUCT: EOIs

Summary: *A simple guide to how an IRC can ensure that the service it delivers to IRCs is professional, delivering the same level of service to your colleagues in the network as you would expect your colleagues to deliver to you.*   ***Mark Schneider***

8.1 THE WAY WE SHOULD WORK

This document has been produced in response to concerns raised over the quality and consistency of services delivered by IRCs to their colleagues in the network. The success of the network rests upon the quality of companies that the IRCs work with and their commitment to the technology transfer process (see attached an example of a company/IRC commitment agreement). However these factors are irrelevant if IRCs deliver a poor quality service to their colleagues. This document offers a simple guide, how an IRC can ensure that the service it delivers is professional. The premise upon which all codes of conduct are based is the same, treat others in the way you wished to be treated yourself. This document should be seen and used in the same light, deliver the same level of service to your colleagues in the network as you would expect them to deliver to you. This document focuses on the BBS, however what is described, the professional follow-up of expressions of interest is applicable to most IRC activities.

1. **Wherever possible** EOIs (expressions of interest) received by an IRC should be passed onto the company behind the profile within 5 working days of its receipt and the IRC behind the EOI should be informed.

2. EOIs must be clearly defined to ensure that a response can be made within the allotted time. The EOI should:
- Provide both the title and reference number of the TO/TR
- Provide a brief profile of the company and contact details if the company is happy to supply them at this stage
- For a TR explain what the company is offering to solve the problem or match the need described
- For a TO explain how the company would like to use or exploit the technology being offered
- If further information is required specify exactly what type of information is required

3. **Wherever possible** EOIs should receive a response within 10 working days. The response should either:
- Confirm that the company is interested in developing further contacts
- The company is not responding because…...
- That more information is required (see above)
- That the EOI is still being considered
- That the match is not appropriate

3. The IRC representing the company should keep the IRC behind the EOI regularly informed of the progress with the TOTR, generally a monthly update would be appropriate.

4. **Wherever possible** all enquiries from either IRC should receive a response within 3 working days even if there is no new information available. An indication that nothing is happening is better than complete silence.

5. If there is a positive response to the EOI and company details are exchanged then the company IRC should, where possible, provide a monthly update on progress to the EOI IRC. Once again an indication that nothing is happening is better than complete silence.

6. If either of the companies are reluctant to move forward with the negotiation process then each IRC has an obligation to be honest and inform the other side that in their opinion there is no serious chance of TTT. Each IRC is best placed to assess the commitment of their clients.

7. If a profile is dead then all those involved must be informed and if the profile is on the BBS it should be removed by the IRC.

8.2 COMPANY AND IRC COMMITMENT

1. Before the technology profile is sent out the Project Officer shall ensure that the company behind the profile is fully committed to the TTT process, it understands the implications of submitting the profile and the obligations placed upon it.

- It must respond promptly to any enquiries whether from its local IRC, the transnational IRC or the match, even if the response is negative
- It must have extra information available to support the original technology profile
- Be prepared to talk with companies provided by the network if they match their needs
- That the company will keep its local IRC informed of all negotiations and discussions that may develop from initial contacts supplied by the network

2. If possible the Project Officer should ask the company to sign a commitment agreement with the IRC which will clearly outline what is expected of the company and in return what the company can expect from the IRC.

The following is an example of the type of agreement a company and IRC might sign.

I the undersigned, representative of company xxxxxxxxxx agree to respond promptly to any requests made by the IRC xxxxxxxxx relating to the promotion of product/technology/service xxxxxxxxxxxxx or the search for technology solution relating to xxxxxxxxx through the IRC network. This may include a request for more detailed information or the serious assessment of company profiles provided by the IRC that match the requirements of company xxxxxxxxxxxxx. Further that if any addition discussions develop from the initial contact provided by IRC xxxxxxx I shall keep the IRC informed.

In return IRC xxxxxxxxxx is committed to effectively promote company xxxxxxxxxxxxx's product/technology/service or search for a technology solution through the IRC network. Specifically

- the IRC will assist with the production of a technology profile
- Will promote this technology profile to the network
- Will screen and match any responses from the network to ensure that what the company receives is of use
- Will ensure that any companies provided are committed to the IRC process and provide as much information as is required by company xxxxxxxxxx.
- Will keep company xxxxxxxxxx regularly updated on the progress with the technology profile
- Will provide the necessary assistance (translations, location for meeting, etc.) for any negotiations that may result from the matching process
- Will provide the necessary assistance (travel arrangements, location for meeting translations etc.) if face-to-face negotiations result from the initial discussions
- Will provide advice and assistance with issues relating to contract negotiations, licensing, IPR etc. and any other services that are deemed appropriate by the IRC and the company.

9 GUIDELINES AND PROCEDURES FOR TTT EVENTS

Summary: *This chapter considers how to deliver successful TTT events and in particular* **BROKERAGE EVENTS AND TTT MISSIONS**. *Mark Schneider*

9.1 INTRODUCTION

The term APSS (Active Partner Search Service) encompasses any activity where IRCs prearrange face to face meetings between their companies The main purpose of this service is to shorten the time between the matching and meeting of potential partners. The main tools used to support this service are brokerage events, technology transfer missions and to a lesser extent investment forum. APSS is most effective when it focuses on individual industrial sectors.

9.2 DEFINITION OF A BROAKERAGE EVENT

A brokerage event is a series of prearranged transnational meetings organised at a single venue for SMEs from across Europe. In the contract period April 2000 to March 2002 IRCs used brokerage events 14% of the time to generate TTT agreements.

Location

In the main brokerage events are organised at trade shows, exhibitions or conferences, although some are organised as stand alone events. Using another event as a host for a brokerage event can bring added value for the companies in the form of free entrance to the fair, inclusion in the fair's catalogue and the opportunity for extra meetings to be organised with other companies attending the event.

Brokerage Event Catalogue

The most essential element of any brokerage event is the catalogue of technology profiles. This document is used by the IRCs to match companies and organise meetings. As well as being produced in a paper format it is also extremely useful to have an online electronic version available. The latter increases flexibility, allowing profiles to be submitted closer to the event and for any changes to be made quickly. IRCs can also instantaneously register interest in a technology profile. Generally the paper version of catalogue must be finalised and printed 4-6 weeks before the event to allow enough time for matching and further company recruitment to take place.

Stand Space

Generally, the host IRC will have a stand or be sharing stand space. The stand should have enough room to host the company face-to-face meetings. However as stand space at events is expensive, to save money it may be possible to use hospitality spaces close to the hall as venues for meetings.

Number of Meetings

With half an hour for each meeting, the maximum number of meetings per company is approximately 6 a day. It is also important that time be left for meetings to be organised on the day of the event.

Number of Companies Involved

For a brokerage event to be successful there must be a sufficient number of technology profiles for companies to choose from. Most brokerage events have a minimum of 150 meetings organised between companies, this equates to approximately 50 companies attending an event.

Logistics

One of the major tasks for the host organisation is the scheduling of the meetings. Previously this was a labour intensive and time consuming, however downloadable software will be made available on the IRC Website during 2002.

9.3 DEFINITION OF A TTT MISSION

TTT missions bring together small groups of SMEs for prearranged, transnational, face-to-face meetings. In the contract period April 2000 to March 2002 IRCs used technology transfer missions 8% of the time to generate TTT agreements.

Location
TTT mission meetings can take place in a number of different locations including company premises, hotels, IRC offices, at a brokerage event or the local Embassy. The most productive location is generally company premises.

Scale
TTT missions are on a smaller scale than brokerage events, normally involving IRCs from 2 countries. Generally no more than 5 companies will travel, with each company having approximately 3-6 meetings.

Length of Mission
TTT missions normally last 2 days, simply because this is the maximum period of time that most representatives can afford to spend away from their companies.

Visits & Presentations
As part of the mission, visits to relevant research organisations, government departments or exhibitions can be organised. As well as bringing added value to the mission, these give companies a useful overview of the economic potential of the country or region being visited.

9.4 LOCATING COMPANIES
As APSS is a sector focused activity company recruitment must also be sector focused. Before beginning to recruit companies a number of fundamental questions have to be answered.
- Does the sector exist in the IRC region?
- If the sector is present is it large enough? If the IRC has a target of 5 companies, this target is more likely to be achieved if there are 50 rather than 5 companies in the appropriate industrial sector.
- Will the IRC be able to gain effective access to the industrial sector?
- Will the IRC be able to establish a permanent relationship with companies in the sector?

Having a sector focus
Of the above questions the last is the most important for the long term success of an IRC. APSS is a hard service to sell, not only do the companies have to be innovative and committed to the TTT process, they must also be willing to travel and pay for the privilege. Therefore, it makes sense for an IRC to select certain sectors and develop permanent links with companies for the delivery of all IRC services, rather than finding an event and then targeting a sector. Once this group of clients has been established the next event will be easier to sell.

Identifying Industrial Clusters
It is fairly straightforward to identify innovation rich and poor sectors in a region, regional development agencies and other regional support networks spend time and resources identifying the strengths and weaknesses of a region. Such reports and the agencies themselves, should be targeted to assist with the identification of clusters.

Exploiting Industrial Clusters
The identification of innovation poor and rich industrial clusters may be straightforward, however gaining access and then being able to deliver services to these clusters is a rather more complex issue. Ultimately, access can only be guaranteed if a company believes an IRC will deliver what it has promised to. For more information on these issues please refer to the section dealing with recruiting innovative companies. One of the best ways to gain access to a cluster is to establish good links with the trade association that represents it. Once again these types of contacts can only be established if the trade association is convinced it is backing an organisation that will benefit their companies.

Ensuring a ready source of companies

The most successful approach when organising any TTT event is to have a portfolio of companies that are always interested in travelling and/or are open to meeting with companies from across Europe. This on-tap approach can be realised through the establishment of an SME Club or SIG (Special Interest Group). An SME Club is an industrial cluster of SMEs that are brought together through regular use of specific IRC services. The companies are interested in developing their European markets and the IRC can provide access to Europe through the IRC network. An SME club is a very flexible concept and essentially it should provide whatever services are attractive to SMEs. The following are examples of some of those services:

- Access to relevant TOTRs, for example through an automatic matching system
- Access to the network to develop transnational partnerships with other companies
- Participation in IRC Brokerage Events
- Participation in IRC TTT Missions
- Club newsletter providing regular updates on activities and events
- Access to other European SME clubs
- Source of information on European issues relating to the sector
- Regular meetings to discuss issues relating to Europe
- Help desk to answer queries relating to European issues
- Access to experts on the sector
- If one exists providing access to the thematic group representing that sector

Clearly, many of these services are costly and an IRC should consider whether SMEs would be prepared to pay for them. The most effective way to ensure that SME Clubs function to their full potential is to link them to the appropriate thematic group and thereby bringing the club into contact with the most active groups of IRCs in their industrial sector.

9.5 PRE-EVENT PLANNING

Selecting the event (Up to 1 year before the event)

Before selecting an event it is important that an IRC should be able to answer the following questions:
What event would be right for the companies? The simplest way to answer this question is to ask the companies

- Is it a high profile event? It will be easier to recruit companies if the event has a good reputation within the targeted industrial sector.
- What else is going on the sector? Is there another more prestigious event taking place around the time of the planned event?
- How difficult will the event be to get to? Logistics are a major concern, if the event does not have favourable transport links will it be too time consuming or too expensive to reach?
- At what time of year is the event taking place? If the event is taking place in Northern Europe during January, then the weather could be an issue. Does the event coincide with public holidays? If it does then company recruitment will be problematic.

Developing useful network partnerships (6 months before the event)

Of as much importance as the event is the strength of the relationship between the IRC partners planning the event. If this relationship is based upon trust and professionalism then the event is more likely to be successful. One of the better ways to cement the relationship with partners is to meet them; it is harder to deliver a poor quality service to a colleague than to an email address or a voice at the end of a telephone line. Clearly, a meeting will not always be feasible, especially if the partners are from opposite ends of Europe. Within the network there are 3 obvious routes for developing strong IRC links:

Thematic Groups

In response to a need identified by the network, IRCs established a number of groups based around different industrial sectors. These groups bring together IRCs from regions with similar industrial

profiles. There are presently 14 thematic groups including automotive, renewable energy, medical, biotechnology and environment. Thematic groups have an elected IRC chair who directs the activities of the group, organising meetings and events. Each group is divided into observers and members. Any IRC can be an observer of a group, however to become a full member a commitment agreement must be signed. The groups meet regularly and this provides an opportunity for network links to be established. The synergy between the thematic groups and APSS is clear and this is why the activities of most thematic groups are based around brokerage events and missions.

IRC Staff Exchanges
Most IRC staff use an exchange as an opportunity to pick up tips on how undertake certain activities, to meet companies, to find out more about a region and meet their opposite number. In many ways an IRC staff exchange is the best preparation for a technology transfer event. Company profiles can be discussed, relevant companies can be visited and arrangements can be finalised.

Event Preparation Forum
This tool was developed and introduced by the CU to aid with the search for IRC partners. IRCs searching for partners can advertise on the IRC website at http://www.ircnet.lu/src/trans-initiatives/trans-initiatives.cfm. Expressions of interest can also be registered on the same site. The Calendar of Events is also available and allows further advertising once the event and partners are in place http://www.ircnet.lu/src/events/viewevents.cfm.

9.6 RECRUITING COMPANIES
The quality of companies recruited to participate in a TTT event will have a strong influence on whether it succeeds or fails. IRCs need innovative, committed companies that know why they are travelling and what they hope to gain from the event. The process of recruiting such companies is the same as recruitment for any other services offered by an IRC. Suitable companies must be located and visited, their requirements must be identified and a technology profile produced. Company recruitment has already been discussed in some detail in a previous section of the Operational Manual, however to summarise an IRC should:

- Undertake a mail shot of existing clients
- Search the BBS for relevant profiles; this is an easy method of ensuring foreign participation at an event
- Undertake a targeted mailing of the relevant industrial cluster, directly or through a trade association
- Advertise the event on the IRC website Calendar of Events
- Advertise the event in the IRC's own newsletter
- If possible advertise in other relevant magazines, journals, newspapers etc.
- Advertise the event on the IRC's own website

As has already been stated APSS is a challenging service to sell, however there are a number of strategies that can be adopted to encourage company participation

Focus on the event
Most company representatives do not have much time. When producing promotional material or discussing the event, focus on the benefits rather than which network is supporting the mission and who is organising the event. When the IRC event is taking place at an exhibition or fair, highlight this fact.

Guaranteed meetings
If an IRC is feeling confident guarantee a minimum number of face-to-face meetings.

Low Cost
If the costs can be kept low, the company contribution to around 500 Euro, SMEs will be more prepared to travel.

Time Constraints
In many cases money is not the main issue for a company but time away from the business. Generally the trip should be as short as possible, normally no more than 2 days.

Package Deal
Most companies with not consider travelling if they are required to make their own arrangements. If an IRC can offer a package deal by arranging all flights, transfers, accommodation and meetings for a fixed price, then the company is more likely to be interested.

Information Day
Offer companies a pre-visit information day with advice on cultural issues and doing business in the region to be visited.

Market Report
Offer the companies a market report on the sector and the region they will be visiting. The commercial section of the IRC's Embassy in the region to be visited may be able to produced such a report.

9.7 ENSURING COMPANY COMMITMENT
Company commitment is a major concern when offering any IRCs services, it is essential if companies are being asked to travel. Whenever possible companies should confirmed their participation at an event by signing some form of commitment agreement. This agreement should ensure that the company is committed to travel once a certain deadline has passed, normally 2-4 weeks before the event. After this time, if the company does not travel, it must meet the full cost of participating at the event.. If possible the company should also pay a deposit in advance of travelling, a percentage of the overall cost of the package being put together by the IRC. Clearly, by committing the company it is also important that the IRC offers clear targets in return. For example the IRC may be required to deliver a minimum number of useful face to face meetings. The commitment process can also be aided if the IRC produces a document detailing the full cost of what it proposes to do for the company, including methodologies, indicative timescales and milestones. This document can then outline what the company will be expected to do and when. The problem of commitment has already been discussed in a previous section, the pro forma developed to ensure company commitment to the BBS could be used in the organisation of TTT events.

9.8 CREATING A TECHNOLOGY PROFILE
Whether it is a brokerage event or mission, the pre-arrangement of meetings will be undertaken on the basis of technology profiles provided by IRCs. Consequently, the construction of a technology profile must be approached with some care and thought. The process is the same as that used for submissions to BBS. Therefore the TOTR guidelines should be used to produce the profile. If the profile does not result in any negotiations for the company it can always be placed on the BBS after the event. To summarise:
- The company should produce the profile with the support of the IRC
- The profile should be as explicit as possible concerning the company's requirements
- The profile should be as explicit as possible concerning the type companies being sought and their role
- The profile should be as explicit as possible concerning the type of agreement sought

9.9 PRODUCING A TT CATALOGUE (8-6 WEEKS)
For most brokerage events a TTT catalogue is produced containing all the technology profiles. This is distributed to companies participating in the event. The technology catalogue is then used by the company and the IRC to select and arrange meetings. The IRC can assist the company with its selection especially if there is a language problem. The catalogue can also be used as a marketing tool by the IRC to recruit new companies for the event. One of the main reasons why profiles have to be

sent to the host no later than 6-4 weeks before the event is to allow the catalogue to be produced and sent out.

9.10 COMPANY ANONYMITY

The point at which the identity of a company is disclosed can be difficult issue, although it is clear that at some point this information must be made available. It will inevitably happen if a meeting is taking place between companies, however if an IRC is representing a company this does not necessarily happen. There are 2 possible approaches to anonymity, company details can be exchanged before the event takes place or once the event has started, both have advantages and disadvantages.

Before the Event

companies are informed of who they will meet once the matching process has begun.

Advantages

Once a name is given to a technology profile it can give a company confidence in the work of the IRC and increase company commitment. It also avoids the problem of a company meeting an industrial rival or companies they already do business with. For these reasons many companies will not agree to travel until they know who they will meet.

Disadvantages

The most obvious disadvantage is that the companies will contact each other before the event, bypassing the IRC and also pulling out of the event. There is no guarantee that this will not happen once company details are disclosed, the IRC can only rely on the honesty of client. The IRC's position can be strengthen if it has a strong relationship with the company, if a commitment agreement has already been signed or if other added value activities aside from just the meetings have been organised (a visit to research centre, attendance at a conference etc).

During the Event

The name of the companies are only disclosed as the meeting is about to take place.

Advantages

The IRC avoids the possibility that a company will go it alone and contact a match independently

Disadvantages

Companies are less likely to agree to travel without having a clear idea of who they are meeting

9.11 EVENT WEBSITE (6 months before the event)

The whole process of company recruitment and matching can be eased if the host IRC is able to establish a website specifically for the event. This can be used to advertise and recruit new companies and keep participants informed of changes to the agenda. The other major benefit of a website is that it allows the brokerage event catalogue to be placed online. Profiles can be added by the IRC as and when they are completed, making the matching process more flexible. Matching also becomes easier for the companies as they and the IRCs have instantaneous access to an up-to-date version of the catalogue.

9.12 THE EVENT

Travelling with Companies

The purpose of travelling to an event is to allow face-to face company meetings to take place. The role of the IRC representative is to ensure that any problems that could prevent this (transport, transfers, language etc) are solved. Beyond this the IRC should take the chance to socialise with companies, it is a good opportunity to establish a personal relationship and assist with the process of turning a company into a client. As TTT missions are on a smaller scale than brokerage events it is generally easier to organise social activities such as evening meals or drinks with companies.

Representing Companies

For many reasons it is sometimes impossible for a company to travel to an event. An IRC may then be asked to represent the company. To do this effectively requires a great deal of preparation. Before travelling to the event the IRC should:

- Spend time with the company to become familiar with its products, processes and technologies
- Discuss in detail the company's technology profile
- Be aware of the questions the company wishes to have answered during the meetings
- Be sufficiently briefed to be able to answer any questions asked during the meetings
- However it is clear that no matter how well prepared an IRC is, the lack of a company representative at an event can never be fully compensated for. A company will be less impressed by an IRC stand-in than another company. Consequently, the IRC should always encourage their companies to travel. Unless the reason for not travelling is convincing a company's commitment to the TTT process will always be question.

9.13 MAKING USE OF YOUR EMBASSY IN THE REGION

Added value can brought to events through the development of links with the Embassy in the region to be visited. Most Embassies have commercial sections whose task it is to promote their country's products. If an IRC is planning to take companies to another part of Europe it is always worth contacting the local Embassy to see if they would like to be involved. Embassies normally have their own client databases and can therefore support the local IRC with company matching. The Embassy also has local influence and in many cases can arrange meetings with companies that an IRC would be struggling to gain a response from. The involvement of the Embassy will also improve media coverage of an event, particularly if the Ambassador can attend. The Embassy may also be prepared to host a reception for the companies attending the event.

9.14 FOLLOW-UP ACTIVITIES

As with all IRC activities the hardest part of the work is the tracking and follow-up of company meetings. Generally, the most effective way to manage this activity is for the IRC hosting the event to coordinate the collection of information. The planning and execution of an event is only half the story. A strategy must be in place to ensure that as much information can be collected after the event as possible. The host IRC should have a schedule in place that involves regular follow-up letters or calls to its IRC partners asking for progress reports. Commonly a schedule of 1 month, 3 months, 6 months and a year is followed. Although the host IRC is coordinating the follow-up it should remain the responsibility of each partner IRC to track and follow the negotiations of its companies.

9.15 FUTURE EVENTS

The following Gantt chart offers a summary of the time scales for a technology transfer event including the follow up activities. These timescales should be regarded as indicative, however it is clear that an event requires a great deal of planning. Obviously, once an event has been organised and successfully delivered any new events should take less time to prepare. Links to an industrial sector will already have been established, partnerships with trade associations etc will already be in place and companies who travelled before may well be available to travel again. Therefore, for new events in the same the sector the organisation could start 7 months before the event is due to take place. Clearly the strengths of all the links mentioned above are entirely dependant upon the success of the original event. If the event is a disaster then all groundwork will have to begin again and probably in another sector.

Task Name	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	-1	-2
Identify the sector	◆▬																				
Identify trade associations etc.		◆▬																			
Identify IRC partners		◆▬▬▬▬																			
Agree on Programme					◆																
Company recruitment					◆▬▬▬▬▬																
Pre-visit Meeting with IRC partners										◆											
Technology Profiles to the host								◆▬▬													
Matching Process by host										◆▬											
Pre-book tickets, hotels etc.									◆												
Confirm tarvel arrangements												◆									
Logistic Arrangements												◆									
Information Day												◆									
Event												▲									
Follow-up Activities													◆┈┈┈┃┈┈┈┈┃								

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9.16 ANNEX 1: PROCEDURES FOR ORGANISING A TTT MISSION

1. Identify the industrial sector and ensure that companies can be recruited to participate in the event. **(12 months)**

2. Develop links with the relevant trade association to support the effective penetration of the sector **(From 12 months onwards)**

3. Identify sources of co-funding, sponsorship and support for the event **(From 12 months onwards)**. Contact
- The relevant trade association
- The local chamber of commerce
- The government department dealing with importing/exporting

4. Identify and select IRC network partners **(From 12-months onwards)**

5. Decide how company recruitment will proceed, will
- The host provide profiles for the partners to match
- The partners provide the profiles for the host to match. Generally on a mission the IRC travelling provides the profiles for the host to match.
- Both host and partners will provide profiles and all parties will provide matches

6. Finalise the programme with the host **(3 months)**.
- Will a conference, fair or exhibition be included in the programme?
- Will a visit to research, testing or training institute be included in the programme?

7. Begin recruiting companies **(4 months)**. When recruiting companies the IRC should explain clearly
- The purpose of the event – a series of face to face meetings
- What is expected of the companies – preparation etc
- What the companies can expect from the meetings – the development of transnational partnerships etc.

8. Advertise the event on the Calendar of Events **(3 months)**

9. If possible organise a pre-visit meeting at the host IRC. This meeting is most usefully held towards the end of the company recruitment exercise so that profiles can be discussed. **(6-8 weeks)**

10. Whenever possible companies agreeing to travel should sign a commitment agreement and pay a deposit.

11. Ensure that every company travelling has their own travel insurance. Avoid offering group travel insurance as this could involve the IRC in travel claims. Similarly, if a company is hiring a car aboard ensure that they have a valid driving licence.

11. Once companies have been recruited the IRC should, in conjunction with the companies, produce technology profiles. Where possible the IRC should use the Guidelines for Completing TOTRs **(3-1 months)**

12. As the profiles are produced they should be passed onto the host so that the matching process can begin **(3–1 months)** The final deadline should, where possible, be 4 weeks before the event.

13. Once the profiles have been passed on, the host must keep its IRC partners informed of the progress with the matching of profiles **(3 months onwards)**.

14. Companies should always be given the technology profiles of their proposed matches to ensure that they are interested in having meetings with the companies identified **(3 months onwards).**

15. Whenever possible the matching process should be completed **2-4 weeks** before the event is due to take place. The deadline set should coincide with that given in the company commitment agreement, the time beyond which a company cannot pull out of the event without meeting the full cost of the event.

16. The deadline set for the completion of the matching process should not be changed. However there is no reason why meetings cannot be added, although it is more common for meetings to be cancelled. The Host: Cancellations are a valid reason for the companies travelling to cancel their plans, therefore to avoid the event collapsing every effort must be made to organise new meetings.

The partner IRC(s): Cancellation of travel by companies is far more serious as it is unlikely that a replacement will be found at short notice. Therefore, only under exceptional circumstances can a company cancel its participation in an event.

17. Confirm the event logistics with partners **(4 weeks)**
- Will the companies be travelling to meetings together or separately?
- If together will a minivan be used and who will drive it?
- If separately how will the companies travel to meetings, via public transport, taxi etc?
- Who will provide the companies with travel instructions for the separate meetings?
- Will language be a problem? will interpreters be required?

18. If a package deal has been offered to companies, confirm all the travel arrangements including , hotels, flights and transfers **(2 weeks)**

19. Organise an information day for the companies travelling **(1 week)**. This meeting will be an opportunity for the companies to become acquainted. The information day could include:
- Presentations on the region to be visited
- Presentations on the industrial sector in that region
- Information on technology transfer in foreign markets, including particular advice on the region to be visited
- Distribution of information packs containing flight tickets, hotel details, company visit details with maps, and itineraries for any extra visits or events being organised.
- Presentations by co-sponsors

20. Where possible follow-up activities should be coordinated by the host although clearly it is the responsibility of all partners to activity follow-up and track all discussions between the companies. Progress reports should be produced at:
- 1 month after the event
- 3 months after the event
- 6 months after the event

9.17 ANNEX 2 PROCEDURES FOR ORGANISING A BROKERAGE EVENT

1. Identify the industrial sector and ensure that companies can be recruited to participate in the event. **(12 months)**

2. Identify conference, fair, exhibition that will play host to the brokerage event **(12 – 6 months)**

3. Develop links with the relevant trade association to support the effective penetration of the sector **(12 months onwards)**

4. Identify sources of co-funding, sponsorship and support for the event **(12 months onwards**). Contact
- The relevant trade association
- Your local chamber of commerce
- The government department dealing with importing/exporting

5. Identify and select IRC network partners **(12 months onwards)**

6. Begin recruiting companies **(4 months)**. When recruiting companies the IRC should explain clearly
- The purpose of the event – a series of face to face meetings
- What is expected of the companies – preparation etc
- What the companies can expect from the meetings – the development of transnational partnerships etc.

7. If possible the host IRC should establish a website promoting the event **(4 months)**

4. Advertise the event on the Calendar of Events **(3 months)**

5. If possible organise a pre-visit meeting at the host IRC or as part of a thematic group meeting. This meeting is most usefully held towards the end of the company recruitment exercise so that profiles as well as other arrangements for the event can be discussed.

6. Wherever possible companies agreeing to travel should sign a commitment agreement and pay a deposit

7. Ensure that every company travelling has their own travel insurance, avoid offering group travel insurance as this could involve the IRC in travel claims.

8. Once companies have been recruited the IRC should in conjunction with the companies produce technology profiles. Where possible the IRC should use the Guidelines for completing TOTRs **(3-1 months)**

9. As the profiles are produced they should be passed onto the host so they can be included in the brokerage event catalogue **(3–1 months)**. If the catalogue is available online the matching process can begin earlier. Whenever possible the final deadline for the delivery of profiles should be 4 weeks before the event.

10. Once the profiles have been passed on, the host must keep its IRC partners informed of the progress with the matching of profiles **(3 months onwards).**

11. Companies should use the catalogue to make the final decision concerning who they would like to meet with, the IRC should offer support and guidance particularly if language is a problem. **(3-0.5 months).**

12. Whenever possible the matching process should be completed **2-4 weeks** before the event is due to take place. The deadline set should coincide with that given in the company commitment agreement, the time beyond which a company cannot pullout of the event without meeting the full cost of the mission.

13. The deadline set for the completion of the matching process should not be changed. However there is no reason why meetings cannot be added, although it is more common for meetings to be cancelled. The Host: Cancellations are a valid reason for the companies travelling to cancel their plans, therefore to avoid the event collapsing every effort must be made to organise new meetings.

The partner IRC(s): Cancellation of travel by companies is far more serious as it is unlikely that a replacement will be found at short notice. Therefore only under exceptional circumstances can a company cancel its participation in an event and avoid paying for the full cost of the mission.

14. If a package deal has been offered to companies confirm all the pre-booked travel arrangements including , hotels, flights and transfers **(2 weeks)**

15. Organise an information day for the companies travelling **(1 week)**. This meeting will be an opportunity for the group of companies to become acquainted. The information day should include:
- Presentations on the region to be visited
- Presentations on the industrial sector in that region
- Information on technology transfer in foreign markets, including particular advice on the region to be visited
- Distribution of information packs contact flight tickets, hotel details and meeting plan
- Presentations by co-sponsors

During the Meeting

16. There are certain logistical elements of the event that are the responsibility of the host IRC, these include:
- The timetabling of meetings between the companies
- Making the partner IRCs and their companies aware of the timetable
- Keeping to the timetable as much as possible
- The provision of desks and chairs for the company-company discussions
- Providing sufficient space for all meetings to take place without interruption
- Providing participants with the contact details of all participating organisations on the first day of the meeting
- Providing clearly numbered tables for the meetings
- Specifying the table number on each participant's meeting schedule
- Searching and bringing to the meeting table missing participants
- Being ready to add, subtract and change the meeting schedule

17. Where possible follow-up activities should be coordinated by the host, although clearly it is the responsibility of all partners to activity follow-up and track discussions between the companies. Progress reports should be produced
- 1 month after the event
- 3 months after the event
- 6 months after the event

10 A GUIDE TO NEGOTIATING AGREEMENTS

Summary: This chapter will consider the use of **NEGOTIATION CHECKLISTS** as an aid in the negotiation process and high the valuable role an IRC can play as an **IMPARTIAL FACILITATOR**

Mark Schneider

10.1 INTRODUCTION

The negotiation of a contract is a specialised activity requiring skills that most IRC generalists will not possess. Consequently, once technology transfer has reached this stage contract lawyers are likely to be playing a more prominent role than most IRCs. Although an IRC may be taking a secondary role, it is important that the process is not completely abandoned to the lawyers. Having established a good working relationship with a company over a period of months, or years the IRC is in a position to act as an impartial facilitator during the negotiation phase, ensuring that both parties are happy with the final agreement. This role is one that the IRC is perfectly placed to play as no financial reward is riding on the final outcome of the agreement. Therefore, it is important that an IRC is sufficiently knowledgeable of the negotiation process to be able to perform the role of an impartial facilitator with clarity and intelligence.

10.2 THE ROLE OF AN IRC

As a generalist the IRC should ensure that the foundations of the negotiation are sound, that no important elements are overlooked. Such a task is essential if a standard template is being used. Clauses may be included in the final agreement that are not beneficial, or crucial elements may be ignored because the template contains no reference to them. One of the most effective ways to ensure that all issues are considered is to use a checklist.

10.3 CHECKLIST FOR NEGOTIATING A LICENSING AGREEMENT

- Information on the companies
- Definition of agreement matter - invention, trade secret, technical documents, manufacturing observations etc
- Transfer or leasing
- The right of the transferor or licensor to dispose of agreement matter
- What kind of legal protection is available?
- Exclusive or non-exclusive right?
- Restriction of executive right - geographically, commercially and technically or through information of purpose
- Protection of and right to supplementary innovations and improvements of the licensor
- Protection of right to the licensee's improvements
- Right to technical assistance
- Demands for quality and quality control
- Registered trademark compulsion
- Obligation of licensee to carry out exploitation in the best possible way
- Export rights
- Obligation to tolerate import
- Obligation to apply for and maintaining patent
- Distribution of patent fees
- Compensation
- single payment - deductible or not
- compensation for technical assistance
- compensation for technical documents
- royalty - unit licence or percentage licence fee
- minimum royalty
- Point in time when right to royalty begins
- Basis for calculation of percentage licence fee - sales price, special rules when selling to group companies and leasing
- Due dates

- Accounts and accounting periods
- Accounting controls
- Undertaking not to attack patent applications and patent
- Obligation to give notice of infringement
- Proceedings at third party patent infringement
- Proceedings at the assertion of third party patent infringement
- Who is to stand patent process costs?
- Distribution of indemnification due after infringement process
- Leasing of trademark licence
- Right to sublicense
- Secrecy clause
- Market loss or reduction that is not the provoking of purchaser or licensee
- Royalty tax, agreement stamp duty
- Registration of licence/transfer
- Consequence when minimum production has not been reached/when minimum royalty has not been paid
- Consequence of breach of contract
- Bankruptcy of purchaser or licensee
- Term of the agreement - after that remaining rights and obligations
- Regulations of liquidation period
- Liquidation of current production and sales at cease of agreement
- Form of change of agreement
- Applicable law
- Possible arbitration clause

10.4 CHECKLIST FOR AN OPTION AGREEMENT

- Information on the companies
- Option object
- Option time
- Option compensation
- Technical information
- Secrecy
- Trial manufacture
- Returning material
- Improvements, patents
- Prohibition of use after option expiry date
- Regulation of future conditions if the option is used
- Indemnification – penalty
- Dispute regulation

10.5 CHECKLIST FOR A SECRECY AGREEMENT

- Information on the companies
- Secrecy object
- Specification of the other party's use of secrecy object
- Purpose
- Other party's handling procedures
- Copying
- Returning material
- Improvements, patent
- Prohibition of use after agreement expiry date

- Indemnification – penalty
- Dispute regulation

10.6 DRAWING UP A CONTRACT
If involved in the drawing up of a contract an IRC should avoid reinventing the wheel:

Look at sample contracts and forms
The best way to start drafting a contract is to look at several sample forms that may be similar to the contract being negotiated. If the sample forms are good, they will also highlight issues that may not have been considered. For examples of standard contracts visit the IRC Library http://www.ircnet.lu/src/library/home.cfm?cat=95 or see Annex 3.

Do not be too reliant on sample contracts
Although standard contracts can be useful they should not be copied. Often a sample contract will not be completely applicable and copying it could complicate the negotiation. Most forms should be seen as a starting point and then revised and adapted to suit the particular negotiation.

10.7 CONTENT OF A CONTRACT
As generalists the IRC should be on-hand to ensure that the basics are not ignored when the contract is being put together.

Clarity
Ambiguous language in any contract will lead to misunderstandings, delays, frustration, and perhaps even litigation. Wherever possible the language used should clearly define the responsibilities and obligations of all parties.

Completeness
In many cases those involved in the negotiation may believe that something is so apparent and clear that it does not require to be defined within the contract. Nothing should be taken for granted, if something is important it should be included in the contract.

10.8 ANNEX 1: EXAMPLE OF A TECHNOLOGY LICENSING AGREEMENT

THIS Agreement is between the ("The Developer") whose address is XXX and XXX , a corporation having a principal place of business located at XXX ("The Recipient").

RECITALS

A. The Developer owns certain Technology Rights related to Licensed Subject Matter, which were developed at The XXX ("University"), a component institution of The Developer.

B. The Developer desires to have the Licensed Subject Matter developed and used for the benefit of The Recipient, Inventor, The Developer and the public as outlined in The Developer's Intellectual Property Policy.

C. The Recipient wishes to obtain a license from The developer to practice Licensed Subject Matter.

NOW, THEREFORE, in consideration of the mutual covenants and premises herein contained, the parties agree as follows:

1. EFFECTIVE DATE

This Agreement is effective _____ ("Effective Date").

2. DEFINITIONS

As used in this Agreement, the following terms have the meanings indicated:

2.1 "**Affiliate**" means any business entity more than 50% owned by The Recipient, any business entity which owns more than 50% of The Recipient, or any business entity that is more than 50% owned by a business entity that owns more than 50% of The Recipient.

2.2 "**Licensed Field**" means _____.

2.3 "**Licensed Product**" means any product Sold by The Recipient comprising Licensed Subject Matter pursuant to this Agreement.

2.4 "**Licensed Subject Matter**" means inventions and discoveries considered to be proprietary know-how or Technology Rights which are within Licensed Field.

2.5 "**Licensed Territory**" means the _____.

2.6 "**Net Sales**" means the gross revenues received by The Recipient from the Sale of Licensed Products less sales and/or use taxes actually paid, import and/or export duties actually paid, outbound transportation prepaid or allowed, and amounts allowed or credited due to returns (not to exceed the original billing or invoice amount).

2.7 "**Sale or Sold**" means the transfer or disposition of a Licensed Product for value to a party other than The Recipient.

2.8 "**Technology Rights**" means The Developer's rights in technical information, know-how, processes, procedures, compositions, devices, methods, formulas, protocols, techniques, software, designs, drawings or data created by _____ ("Inventor") at University before the Effective Date relating to _____.

3. WARRANTY: SUPERIOR-RIGHTS

3.1 Except for the rights, if any, of the Government of the XXX, as set forth below, The Developer represents and warrants its belief that (i) it is the owner of the entire right, title, and interest in and to Licensed Subject Matter, (ii) it has the sole right to grant licenses thereunder, and (iii) it has not knowingly granted licenses thereunder to any other entity that would restrict rights granted to The Recipient except as stated herein.

3.2 The Recipient understands that the Licensed Subject Matter may have been developed under a funding agreement with the Government of XXX and, if so, that the Government may have certain rights relative thereto. This Agreement is explicitly made subject to the Government's rights under any agreement and any applicable law or regulation. If there is a conflict between an agreement, applicable law or regulation and this Agreement, the terms of the Government agreement, applicable law or regulation shall prevail.

3.3 The Recipient understands and acknowledges that The Developer, by this Agreement, makes no representation as to the operability or fitness for any use, safety, efficacy, ability to obtain regulatory approval, and/or breadth of the Licensed Subject Matter.

3.4 The Recipient, by execution hereof, acknowledges, covenants and agrees that it has not been induced in any way by The Developer, or its employees to enter into this Agreement, and further warrants and represents that (i) it has conducted sufficient due diligence with respect to all items and issues pertaining to this Article 3 and all other matters pertaining to this Agreement; and (ii) The Recipient has adequate knowledge and expertise, or has utilised knowledgeable and expert consultants, to adequately conduct the due diligence, and agrees to accept all risks inherent herein.

4. LICENSE

4.1 The Developer hereby grants to The Recipient a royalty-bearing, exclusive license under Licensed Subject Matter to manufacture, have manufactured, and/or sell Licensed Products within the Licensed Territory for use within Licensed Field. This grant is subject to the payment by The Recipient to The Developer of all consideration as provided herein, and is further subject to rights retained by The Developer to:
Publish the general scientific findings from research related to Licensed Subject Matter subject to the terms of Section 10, Confidential Information; and
Use Licensed Subject Matter for research, teaching and other educationally-related purposes.

4.2 The Recipient may extend the license granted herein to any Affiliate if the Affiliate consents to be bound by this Agreement to the same extent as The Recipient.

4.3 The Recipient may grant sublicenses consistent with this Agreement if The Recipient is responsible for the operations of its sub The Recipients relevant to this Agreement as if the operations were carried out by The Recipient, including the payment of royalties whether or not paid to The Recipient by a sub The Recipient. The Recipient must deliver to The Developer a true and correct copy of each sublicense granted by The Recipient, and any modification or termination thereof, within 30 days after execution, modification, or termination. When this Agreement is terminated, all existing sublicenses granted by The Recipient must be assigned to The Developer.

5. PAYMENTS AND REPORTS

5.1 In consideration of rights granted by The Developer to The Recipient under this Agreement, The Recipient will pay The Developer the following:

A non-refundable license documentation fee in the amount of XXX due and payable when this Agreement is executed by The Recipient;

An annual license reissue fee in the amount of XXX due and payable on each anniversary of the Effective Date beginning on the first anniversary;

A running royalty equal to __% of Net Sales for Licensed Products; and

The first Sale or a minimum yearly royalty of XXX beginning 1 year after approval of offer for Sale of a Licensed Product by the Food and Drug Administration or a comparable foreign regulatory authority.

5.2 In consideration of rights granted by The Developer to The Recipient under this Agreement, The Recipient further agrees to pay The Developer the following after the execution of a sublicense hereunder:

Within 30 days after the execution of the sublicense, a sublicense fee of ___% of any up-front cash payment made to The Recipient in consideration of the sublicense, excluding funds paid to The Recipient for research and development purposes, or XXX, whichever is more;

Within 30 days after the execution of the sublicense, a sublicense fee constituting a cash payment equal to 10% of any non-cash consideration received by The Recipient from a sub The Recipient, such consideration to include, without limitation, equity in other companies or equity investments in The Recipient. The value of an equity investment will be calculated as the average market value of the class of stock involved for 5 consecutive days preceding the execution of the sublicense agreement. In cases where the sublicense agreement calls for payment to The Recipient of a premium over the market value, The Developer will also share 10% of the premium paid to The Recipient; and

One half of the gross revenue royalty payments received on Net Sales of Licensed Products received by The Recipient from any sub The Recipient.

5.3 During the Term of this Agreement and for 1 year thereafter, The Recipient agrees to keep complete and accurate records of its and its sub The Recipients' Sales and Net Sales of Licensed Products under the license granted in this Agreement in sufficient detail to enable the royalties payable hereunder to be determined. The Recipient agrees to permit The Developer or its representatives, at The Developer's expense, to periodically examine its books, ledgers, and records during regular business hours for the purpose of and to the extent necessary to verify any report required under this Agreement. If the amounts due to The Developer are determined to have been underpaid, The Recipient will pay the cost of the examination and accrued interest at the highest allowable rate.

5.4 Within 30 days after March 31, June 30, September 30, and December 31, beginning immediately after the Effective Date, The Recipient must deliver to The Developer a true and accurate written report, even if no payments are due The Developer, giving the particulars of the business conducted by The Recipient and its sub The Recipient(s), if any exist, during the preceding 3 calendar months under this Agreement as are pertinent to calculating payments hereunder. This report will include at least:

the quantities of Licensed Subject Matter that it has produced;

the total Sales;

the calculation of royalties thereon; and

the total royalties computed and due The Developer.

Simultaneously with the delivery of each report, The Recipient must pay to The Developer the amount, if any, due for the period of each report.

5.5 On or before each anniversary of the Effective Date, irrespective of having a first Sale or offer for Sale, The Recipient must deliver to The Developer a written progress report as to The Recipient's (and any sub The Recipient's) efforts and accomplishments during the preceding year in diligently commercialising Licensed Subject Matter in the Licensed Territory and The Recipient's (and, if applicable, sub The Recipient's) commercialisation plans for the upcoming year.

All amounts payable here by The Recipient must be paid in XXX without deductions for taxes, assessments, fees, or charges of any kind. Checks must be payable to The Developer.

6. TERM AND TERMINATION

6.1 The term of this Agreement is from the Effective Date for a period of XXX years.

6.2 Any time after 2 years from the Effective Date, The Developer has the right to terminate the exclusivity of this license in any national political jurisdiction in the Licensed Territory if The Recipient, within 90 days after receiving written notice from The Developer of intended termination of exclusivity, fails to provide written evidence satisfactory to The Developer that The Recipient or its sub The Recipients has commercialised or is actively attempting to commercialise a licensed invention in such jurisdiction(s).

6.3 Any time after 3 years from the Effective Date, The Developer has the right to terminate this license in any national political jurisdiction in the Licensed Territory if The Recipient, within 90 days after receiving written notice from The Developer of intended termination, fails to provide written evidence satisfactory to The Developer that The Recipient or its sub The Recipients has commercialised or is actively attempting to commercialise a licensed invention in such jurisdiction(s).

6.4 The following definitions apply to Article 6: (i) "Commercialise" means having Sales of Licensed Products in such jurisdiction; and (ii) "Active attempts to commercialise" means having Sales of Licensed Products or an effective, ongoing and active research, development, manufacturing, marketing or sales program as appropriate, directed toward obtaining regulatory approval, production or Sales of Licensed Products in any jurisdiction, and plans acceptable to The Developer, in its sole discretion, to commercialise licensed inventions in the jurisdiction(s) that The Developer intends to terminate.

6.5 This Agreement will earlier terminate:
automatically if The Recipient becomes bankrupt or insolvent and/or if the business of The Recipient is placed in the hands of a receiver, assignee, or trustee, whether by voluntary act of The Recipient or otherwise; or
upon 30 days written notice from The Developer if The Recipient breaches or defaults on its obligation to make payments (if any are due) or reports, in accordance with the terms of Article 5, unless, before the end of the 30 day period, The Recipient has cured the default or breach and so notifies The Developer, stating the manner of the cure; or
upon 90 days written notice if The Recipient breaches or defaults on any other obligation under this Agreement, unless, before the end of the 30 day period, The Recipient has cured the default or breach and so notifies The Developer, stating the manner of the cure; or
at any time by mutual written agreement between The Recipient and The Developer, upon 180 days written notice to all parties and subject to any terms herein which survive termination; or
under the provisions of Paragraphs 6.2 and 6.3 if invoked.
6.6 If this Agreement is terminated for any cause:
nothing herein will be construed to release either party of any obligation matured prior to the effective date of the termination;

after the effective date of the termination, The Recipient may sell all Licensed Products and parts therefore it has on hand at the date of termination, if it pays earned royalties thereon according to the terms of Article 5; and

The Recipient will be bound by the provisions of Articles 8 (Indemnification), 9 (Use of The Developer and Component's Name), and 10 (Confidential Information) of this Agreement.

7. ASSIGNMENT

Except in connection with the sale of substantially all of The Recipient's assets to a third party, this Agreement may not be assigned by The Recipient without the prior written consent of The Developer, which will not be unreasonably withheld.

8. INDEMNIFICATION

The Recipient agrees to hold harmless and indemnify The Developer, its Regents, officers, employees and agents from and against any claims, demands, or causes of action whatsoever, including without limitation those arising on account of any injury or death of persons or damage to property caused by, or arising out of, or resulting from, the exercise or practice of the license granted hereunder by The Recipient, its Affiliates or their officers, employees, agents or representatives.

9. USE OF THE DEVELOPER AND COMPONENT'S NAME

The Recipient may not use the name of The Developer without express written consent.

10. CONFIDENTIAL INFORMATION AND PUBLICATION

10.1 The Developer and The Recipient each agree that all information contained in documents marked "confidential" and forwarded to one by the other (i) be received in strict confidence, (ii) be used only for the purposes of this Agreement, and (iii) not be disclosed by the recipient party, its agents or employees without the prior written consent of the other party, except to the extent that the recipient party can establish competent written proof that such information:

was in the public domain at the time of disclosure;

later became part of the public domain through no act or omission of the recipient party, it's employees, agents, successors or assigns;

was lawfully disclosed to the recipient party by a third party having the right to disclose it;

was already known by the recipient party at the time of disclosure;

was independently developed by the recipient; or

is required by law or regulation to be disclosed.

10.2 Each party's obligation of confidence hereunder shall be fulfilled by using at least the same degree of care with the other party's confidential information as it uses to protect its own confidential information. This obligation shall exist while this Agreement is in force and for a period of 3 years thereafter.

10.3 The Developer will submit its manuscript for any proposed publication of research related to Licensed Subject Matter to The Recipient at least 30 days before publication, and The Recipient shall have the right to review and comment upon the publication in order to protect The Recipient's confidential information. Upon The Recipient's request, publication will be delayed up to 60 additional days to enable The Recipient to secure adequate intellectual property protection of The Recipient's property that would be affected by the publication.

11. ALTERNATE DISPUTE RESOLUTION

Any dispute or controversy arising out of or relating to this Agreement, its construction or its actual or alleged breach will be decided by mediation. If the mediation does not result in a resolution of such

dispute or controversy, it will be finally decided by an appropriate method of alternate dispute resolution, including without limitation, arbitration, conducted in the city of XXX in accordance with the Commercial Dispute Resolution. The arbitration panel will include members knowledgeable in the evaluation of XXX technology. Judgment upon the award rendered may be entered in the highest court or forum having jurisdiction, state or federal. The provisions of this Article 11 will not apply to any dispute or controversy as to which any treaty or law prohibits such arbitration. The decision of the arbitration must be sanctioned by a court of law having jurisdiction to be binding upon and enforceable by the parties.

12. GENERAL

12.1 This Agreement constitutes the entire and only agreement between the parties for Licensed Subject Matter and all other prior negotiations, representations, agreements, and understandings are superseded hereby. No agreements altering or supplementing the terms hereof may be made except by a written document signed by both parties.

12.2 Any notice required by this Agreement must be given by prepaid, first class, certified mail, return receipt requested, addressed in the case of The Developer to XXXXX:

or in the case of The Recipient to:XXXX
or other addresses as may be given from time to time under the terms of this notice provision.

12.3 The Recipient must comply with all applicable federal, state and local laws and regulations in connection with its activities pursuant to this Agreement.

12.4 This Agreement will be construed and enforced in accordance with the laws of the XXX.

12.5 Failure of The Developer to enforce a right under this Agreement will not act as a waiver of that right or the ability to later assert that right relative to the particular situation involved.

12.6 Headings are included herein for convenience only and shall not be used to construe this Agreement.

12.7 If any part of this Agreement is for any reason found to be unenforceable, all other parts nevertheless remain enforceable.

IN WITNESS WHEREOF, parties hereto have caused their duly authorized representatives to execute this Agreement.

(THE DEVELOPER) _____   (THE RECIPIENT) _____
By_____   By_____
Name:_____   Name:_____
Title: _____   Title: _____
Date:_____   Date:_____

Approved as to Form:
By_____   Approved as to Content:
Name_____   By_____
Date:_____   Name:_____
Date:_____

Source of the information: University of Texas:
http://www.utsystem.edu/ogc/intellectualproperty/contract/teclic.htm

CU SPONSORED ACTIVITIES SUPPORTING TTT

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11 IRC STAFF EXCHANGE DEFINITIONS & GUIDELINES [2]

Produced with the support of:
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Summary: This chapter considers the benefits that can be gained from staff exchanges. **A DEFINITION** is provided and the **MAIN FEATURES** of staff exchange are highlighted. *Magda de Carli*

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[2] This document has been produced taking into consideration comments made by IRC during the Good Practice Workshop on Staff Exchange in Lulea (Sweden) in June 2001(for more info ref: http://www.ircnet.lu/src/library/home.cfm?cat=124)

11.1 DEFINITION

Staff-exchanges consist of a pre-organised visit of an IRC staff member to another IRC. The purposes behind a staff exchange are threefold:

- To reinforce co-operation between network members by establishing closer relations
- To develop new IRC staff skills through experience sharing
- To initiate technology transfer co-operation on behalf of respective clients.

11.2 MAIN FEATURES

Staff Involved
Generally staff exchanges are undertaken by those that are new to the network or by more experienced staff. With the former the staff exchange will mainly involve be a training exercise with the inexperience member of staff exposed to new methodologies, theories and work practices. The latter will generally have a more focused objective and will probably be undertaken to support some joint venture planned by the IRCs involved in the exchange.

Length
Generally the length of an exchange will depend upon the experience of the staff and the planned objectives. In order for the staff exchange to be efficient, the recommended length is a minimum of three days. However an exchange may last from 1 day to up to 3 months.

Objective
It is evident that the most effective staff exchanges have very a clearly defined objectives, these may include:

- Preparation for a brokerage event
- Organise of a company mission
- The follow-up of contacts made during a brokerage event
- The finalisation a TTT agreement
- The identification of matches for TOs and TRs

In general, a staff-exchange is expected to bring benefit both to the staff visiting the host organisation (in terms of new methodologies learnt, personal contacts, etc) and to the client companies of the IRC (in terms of potential TT matches, participation to brokerage events, organisation of company to company visits, etc).

11.3 CRITICAL FACTORS FOR SUCCESS

Preparation
A successful staff exchange depends on good preparation. A period of two months is considered to be a realistic estimate of the time needed for preparation, although the time required will vary on a case-by-case basis.

Dossier
When the staff-exchange is combined with company visits, a detailed dossier about the companies should be brought and consulted.

Meetings schedule
To ensure that the exchange fulfils the needs of both parties a schedule of meetings should be produced by the host and agreed by the member of staff visiting.

Focusing on TTT
There are many benefits to be gained from a staff exchange, however the final purpose of the exchange should remain the achievement of TTT agreements.

Choose the right companies
When the hosting IRC sends a visiting IRC representative on a company visit, the companies are usually chosen on the basis of their receptivity. Companies should be

Willing to meet the IRC representative, no matter his/her age. The local IRC should highlight their role as an intermediary; their knowledge of their own region and their specific technical competencies

Selected on the basis that they are already entering the negotiation phase and therefore they may be in need of financing that could be provided by the IRC (see IRC Norway – TEFT programme)

11.4 REPORTING
The follow-up of the staff-exchange is as important as the staff-exchange itself. In certain cases, a detailed report will enable the IRC to follow-up the contacts and reach an agreement. New and existing models will be collected and disseminated to IRCs (see IRC East of England model ftp://195.43.96.43/library/ACF4CEE.doc). An 'open report', for instance, could enable IRCs to record follow-up actions, also after a few months.

11.5 TOOLS AVAILABLE
In order to enable IRCs to make the network aware of their availability to host / participate to a staff exchange, CU has created the JOB OPPORTUNITY tool, where messages related to staff-exchange can be posted. http://www.ircnet.lu/src/forum/listmessages.cfm?topic=18

11.6 FINANCING OF STAFF EXCHANGE

National schemes
Some funding programmes for the placement of students do exist (such as the 'Shell' programme in UK). IRCs are encouraged to find out about local opportunities for financing the staff exchanges.

European Programmes
The mobility programme includes an 'exchange of staff' action and on the basis of their role and activities, the IRC staff exchanges may be eligible for funding. In order to apply, a proposal must be submitted where the purpose/action programme/ partnership will have to be specified. Leonardo will proceed with the selection of the best proposals and will finance the travel/ accommodation/subsistence costs up to 900 Euros/person/week. The Staff exchange must last from 1 to 6 weeks. (Mr Gunnarsson, from NLO CEDEFOP in Sweden is the contact person for more info: : **fredrik.gunnarsson@programkontoret.se**)

11.7 STAFF EXCHANGE OUTCOMES
To aid with the diffusion of good practice the CU would be happy to receive copies of the reports produce for each staff exchange. These reports can be provided in whatever format is used by each IRC, although annex 1 contains a generic form. If possible, the report should mention the good practices, the methodologies and tools used or possible problems encountered. IRCs are also invited for statistical purposes to mention in their annual report to the Commission (and in the Management Aid to IRC-IRE CU) TTT results originated from the staff exchange.

11.8 ANNEX 1 IRC STAFF EXCHANGE FORM

IRC Staff Exchange Outcomes
To be completed by the IRC staff undertaking the exchange

Information about the parties involved				
IRC staff who undertook an exchange		IRC Host organisation		
Name: Role: IRC Name: Organisation : Country: Phone: E-mail:		Name of Mentor: Role in IRC: IRC Name: Organisation: Country: Phone: E-mail:		
Arrival Date:		Return Date:		Length of staff-exchange

Main objective of the staff-exchange
☐ Prepare a common brokerage event / TT day
☐ Prepare an SME joint mission
☐ Learn about a specific tool/ methodology
☐ Provide advice on the implementation of a specific tool/methodology
☐ Find suitable partners for local SMEs
☐ others (please specify): Please, provide details:
Why have you chosen to visit especially this IRC? Please, list main reasons.

Common actions undertaken during the visit		
Actions: Suggestions/comments:		
Time spent to visit companies	Time spent to exchange with IRC staff	

4. Benefit for the visiting staff	
What have you learned?	
☐ ☐	

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Have you identify any good practice? Could you please describe it?	
☐☐ ☐ ☐	
How will you use it?	
☐ ☐ ☐	

5. Difficulties encountered	
☐	Language
☐	Organisational matters (explain: ……………..)
☐	Logistics (explain: ……….…)
☐	Collaboration
☐	Other: please specify
Free comments/ suggestions	

6. Benefit to the clients companies			
Number of Companies' profiles brought:: TOs: TRs: RTD results:		Number of Companies visited: Number of potential matches:	
Comments			

7. Outcomes - Results

12 IRC MENTORING INITIATIVE GUIDELINES AND PROCEDURES

Summary: *This chapter explains what is the purpose of the Mentoring scheme and how it can help improve the performance of an IRC.*   **Gudrun Rumpf**

12.1 INTRODUCTION

The IRC Mentoring Initiative has been developed by the CU to foster the exchange of good practice between IRCs with specific expertise and those seeking to develop that expertise in their own organisation. This exchange of expertise can cover any of the activities that IRCs are involved in, from management and delivery of an IRC contract to the acquisition of TTT skills and delivery of IRC services. The CU is tasked with matching the needs of the expertise poor IRCs with those of their expertise rich colleagues.

12.2 THE ROLE OF THE IRC MENTOR

The role of the mentor is to help introduce new services and/or skills to an IRC and strengthen existing services and improve skills. In practice, this does not mean simply developing or implementing a "solution". Instead, the emphasis is on helping the IRC develop their own strategic and operational capabilities. Hopefully this assistance will also lead to the development of strong links between the two IRCs and help achieve transnational technology transfer.

12.3 WHO CAN BE AN IRC MENTOR?

The principal criteria to be an IRC Mentor are:

- **Scope of experience:** The breadth of experience and its relevance to the trainee's organisation. This can be demonstrated through examples of business success, signed TTT agreements with particular emphasis on IRC support services development
- **Coaching skills:** Experience of a range of different coaching skills
- **Active listener:** Questioning style, "hearing", developing, challenging

12.4 HOW IS THE IRC MENTOR INITIATIVE FINANCED?

Both IRCs, the IRC mentor and the IRC trainee will have to support the costs of training, experience sharing, travelling, etc. from their IRC budget. There is no additional financial support for the mentor initiative.

12.5 ROLE OF THE CENTRAL UNIT

The IRC seeking support will be asked by the CU to identify the areas in which they require assistance. The CU will then pinpoint IRCs that may be able to act as a mentor and contact them to see if they would be interested in undertaking the role. At an early stage the trainee and mentor will be encouraged to discuss the development of links so that when a decision is finally made it is to the mutual benefit of both IRCs. It is important that an action plan is developed with clearly defined targets, objectives and timescales. As well as assisting in the matching process the CU will offer continuous support as the mentoring continues to develop.

12.6 THE NEXT STEP

To take advantage of this IRC mentor initiative, please complete the following questionnaire and the CU will endeavour to match you with a suitable mentor. If as an experienced IRC you would like to offer your expertise and give advice / support to other IRCs please complete the IRC mentor questionnaire. Once again the CU will endeavour to promote your experience and match you with a suitable IRC.

12.7 QUESTIONS TO BE ANSWERED BY THE TRAINEE

Name of the IRC		NRC	
Name of the Contact		Email	

1. Describe the current need or gap in your services, why do you require a mentor? (help with marketing / promotion of IRC services, IRC management, define IRC support services in the field of technology transfer, organise a TT brokerage event, etc.)

2. What benefits do you expect the mentorship will provide you with? And your mentor?

3. What specific skills should the mentor possess?

4. Are there any countries you would prefer to work with?

12.8 QUESTIONS TO BE ANSWERED BY THE MENTOR

Name of the IRC		NRC	
Name of the Contact		Email	

1. Describe the current need or gap in your services, why do you require a mentor? (help with marketing / promotion of IRC services, IRC management, define IRC support services in the field of technology transfer, organise a TT brokerage event, etc.)

2. What benefits do you expect the mentorship will provide you with? And your mentor?

3. What specific skills should the mentor possess?

4. Are there any countries you would prefer to work with?

ADDITIONAL IRC SERVICES & ACTIVITIES

13A GUIDE TO INNOVATION FINANCING

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Summary: *This chapter briefly explains the purpose of innovation financing, its sources and what is normally required from a company to be considered for this type of support. Information is provided on BUSINESS ANGELS; VENTURE CAPITALISTS; PRODUCING A BUSINESS PLAN.* **Mark Schneider**

13.1 INTRODUCTION

The search for innovation financing is a specialised activity that most IRCs will not have the time, expertise or capacity to provide to SMEs. The majority will simply signpost companies to the most appropriate sources of information and advice. Although only a signposting service may be being offered it is still important that an IRC is aware of the process behind innovation financing. The following sections will provide basic information on the process and links to more detailed sources of information.

13.2 WHY INNOVATION FINANCING

Many companies particularly SMEs do not have the money to effectively exploit innovative ideas or technologies and require cash injections from external sources. Money can also be a major problem when establishing a company to support the exploitation of innovation. In most cases, without some form of cash/capital injection innovation will fail.

13.3 POSSIBLE SOURCES OF FUNDING

There 2 types of financing available for a business or start-up:

Debt Finance

As the name suggests this is funding that must, at some point, be repaid. Depending upon the source of the finance the repayment may, or may not include interest. This type of finance is normally only suitable in the early, risky stages of innovation, or if a limited amount of money is required. Beyond a certain point debt finance is no longer sustainable and generally as the risk falls other types of finance become available. Debt financing includes:

- **Love Money** from friends and family
- **Bank loans** and overdraft facilities
- **Grants and micro-loans**

Equity Finance

On the basis of possible future success, funding is made available in return for a share or equity in a company. If the innovation proves successful then the value of the equity will increase allowing investors to recoup their investment and make a profit.. Equity finance generally takes 3 forms:

Business Angels

Informal investors who are prepared to use their financial resources to make investments based on their experience and interests. They are likely to take a "hands on" approach to their investment, normally choosing to become a shareholder in the company. Most Business Angels will have previous experience of start-ups, will on average invest between 50,000 – 200,000 Euro and will look for a return on investment of between 3-5 years. For more information on Business Angel Networks (BANs) please visit the European Business Angels Network www.eban.org *Venture Capitalists*

Companies that raise funds on the capital market to buy shares, or convertible bonds in an innovative company. Venture capitalists will generally investor larger amounts of capital in innovative projects. Consequently mature, lower risk companies are normally targeted. Larger amounts of capital also allow venture capitalists to manage their risk more effective. Most will have a portfolio of investments, thereby spreading the risk. Most innovative financing will not be successful, however it only takes one "blockbuster" investment to cover the losses from all the other projects. As large amounts of money are involved the assessment of companies is more comprehensive and contracts are more detailed. Generally, venture capitalists seek a rapid return on their investment and therefore most target SMEs with potentially rapid growth rates.

Public Shares Issue

This provides high growth, innovative companies with a means of raising large amounts of long term capital by selling company shares to outside investors. The company is "floated" on the stock market through an "IPO" (an initial public offering). For many companies an IPO offers the best way of financing

their continued growth and for most venture capitalists is the preferred exit route for their investments. The entry standards imposed for a full listing on traditional stock markets will generally be too rigorous for young technology based companies.

Banks
As a general rule banks are unlikely to invest in the equity of a new company. They can, however, provide loans and conventional banking services. Banks may also offer worldwide financial transaction services, insurance and risk management and provide information brokerage and consultancy services. These are of considerable importance to the smooth financial running of a company. Smaller companies should only consider bank loans if the amount required is small, or if it is needed for a short period of time.

13.4 BUSINESS PLAN
To secure any form of equity finance it is essential that an SME produces a business plan. A business plan describes in detail what a company is planning to do, for example in terms of innovation the development of a new technology. The business plan is being written for the investors and therefore it must address the concerns of those investors. As a minimum the business plan should contain:

An Executive Summary
The purpose of the executive summary is to explain as briefly as possibly (1-2 pages) Who? What? Why? How? It must convince any investor of the merits of the proposal and that an appropriate return on investment will be generated. As this will be the first element of the business plan to come under scrutiny it should be written with care and in a style that will capture the reader's attention. The executive summary should only be written once the rest of the business plan is complete. The executive summary should contain

- Details of who wants the money: The legal structure of the company etc.
- Why the money is required: What is the opportunity, what is being proposed, the idea or innovation
- What will it cost: The investment that will be required, how the money will be used? What is the expected return?, How will the loan be repaid?

Description of the Business
This provides background information on the company and will include

- Information on products and processes, which markets the company is active in
- Details on the structure of the company (sole proprietor, corporation etc)
- How long the company has been established (is it a start-up?)
- How many people are employed
- What are the company's sales volumes
- Financial Information including cash flow, balance sheets and income statements
- How the company is managed including details of the management team (CVs), positions and responsibilities and names of professional advisors (lawyers, accountants, bankers)

The Innovative Product
This section gives a company the opportunity to describe in detail their plans for the future and what will be the benefit to both the company and potential investors. It should include:

Information the Product
What is the product, process or technology, what are its innovative aspects, how is different/better than existing technologies, what benefits will it bring (financial, quality etc).

Information on the potential market
Who are the potential customers? How much will the product costs? What is the size of the market? What is the potential for growth and how much of the market will the company expect to capture?

Profitability
What are the sale projections for the product? What are cash flow forecasts for the company and when will the break even point be reached? The company should include pro forma balance sheets and profit and loss statements

Production
How will the product be developed and produced? What are the production costs? Will new equipment have to be purchased? Will more space be required? What raw materials will be required? Who will be involved and will the structure of the company be changed?

Financial Data
By collecting all the above information for the report a company will be able to define how much money will be required from investors and when is it likely to be repaid. Essentially this section should convince the investor that the proposed innovation it is an attractive investment. The following information should be included:

- When can investors expect repayment?
- Cash Flow, details of when money will be required
- What are the projected start-up costs?
- What are the projected ongoing operating costs?
- What are the estimated sales for each month of the first year?
- What are the anticipated differences between the costs and revenues for each month of the first year?
- What is the break even point?
- How much of the company's own money (equity) can be invested?
- What additional financing will be required from outside sources such as bank loans and other investors?

13.5 What happens after the business plan is submitted?
Once presented to potential investors the business plan will be used as the basis for further investigation. The investors will seek to quantify the risk to any investment they may be willing to make. This investigation will consider the innovative product or process as well as the company itself:

- Is the product really innovative?
- Is there a market for the product?
- What is the IPR status of the innovation?
- Are the sales forecast and trends correct?
- Does the company have the facilities or expertise to deliver what it has promised?
- Is the company's development strategy viable?
- Is their effective management?

13.6 What are the success rates for companies once a business plan is presented?
As money and a degree of risk are involved, the number of companies that reach the final stage of investigation, the due diligence study of legal and financial matters, is small between 0-1%. On average of 10 companies that receive finance support 1 will exceed the expectations of investors, 3 will provide some sort of return on investment and the remainder will fail.

13.7 ROLE OF THE IRC
The following are some of the services the IRC could provide.
Selection and identification of projects suitable for financing. Where possible IRCs should work together to produce and continually update a portfolio of suitable investment opportunities for potential clients.

- Organising meetings with business angels, venture capital funds operators (with possible success fee for the IRC)

- Organisation of "transnational" innovation financing brokerage events such as investment forum (for matching purposes between investors and projects) or through direct contacts
- Assisting companies in the preparation of the business plan. For example an IRC could undertake a valuation of the product, produce a market research report highlighting the competition and the likely positioning of the new product in the market place.
- Assist with the evaluation of technical background and level of innovative projects submitted for financing
- Assist with technical project monitoring after financing
- Providing tailored assistance at the supply level such as ad hoc presentation of projects or the participation in calls for proposals issued by DG Enterprise and related to innovation financing

13.8   USEFUL SOURCES OF INFORMATION

Atlantic Canada Opportunities Agency: http://www.acoa.ca/e/business/info_guide/busiplan.shtml

Boer, P., The Valuation of Technology, Business and financial issues in R&D, ISBN 0-471-31638-5.

Benjamin, G.A. & Margulis, J.B., Angel Financing, How to find and invest in private equity ISBN 0-471-35085-0.

Canada Business Service Centres: http://bsa.cbsc.org/scdt/startup/interface2.nsf/engdoc/0.html

European Business Angels Network www.eban.org

IRC Library: http://www.ircnet.lu/src/library/home.cfm?cat=229

Osnabrugge, M.V. & Robinson, R.J., Angel Investing, The guide for entrepreneurs, individual investors and venture capitalists, ISBN 0-7879-5202-8.

The Gate 2 Growth Programme www.cordis.lu/finance
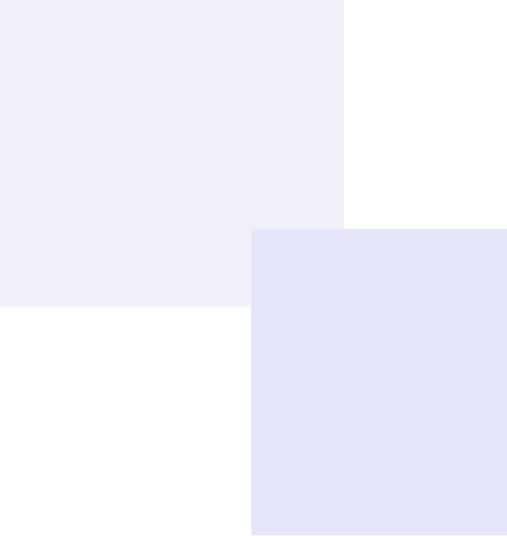
14 A GUIDE TO THE EXPLOITATION OF RTD RESULTS

Summary: *The role of the Innovation Cells is considered and how the IRC network can best work with them.*
Magda de Carli

14.1 INTRODUCTION

According to the wording of the IRC contract with the Commission, one of the IRCs' tasks is 'to promote the transnational dissemination and exploitation of the results of Community research, *including notably those identified by the Innovation Units of the thematic programmes as suitable for third-party exploitation'*. This document deals firstly with 'The approach to Innovation Cells' and secondly with 'Ways of processing the RTD-results received'.

14.2 INNOVATION CELLS

In order to perform the above task, IRCs initially need an indication of which EU RTD results are suitable for third-party exploitation, this can be provided by the Innovation Cells. Each of the Thematic Programmes of the EU RTD Framework Programme has a Unit or Innovation Cell dedicated to the promotion of the exploitation of EU RTD results. During the last 3 years the CU has maintained regular contacts with the Innovation Cells in order to raise the awareness concerning the IRCs' exploitation role and to propose and develop strategies for collaboration.

14.3 THE APPROACH TO INNOVATION CELLS

When approaching the Innovation Cells, IRCs should bear in mind that each unit consists of just one person: Consequently, there limits to the help that each cell can give an individual IRC. On the basis of past experience and according to the preference of the Innovation Cells themselves, the most suitable approach seems to be the following:

'Speaking with one voice'

This approach, widely validated through past experience, is the only one that, according to the Innovation Units themselves, may guarantee the efficiency and effectiveness of the actions in terms of time, resources and impact. The collaboration initiatives up to now are in fact proposed and presented to the Innovation Cells by the CU speaking on behalf of the IRC Network – exploiting in such a way the power of a critical mass. The initiatives proposed by CU either come from a specific request from an IRC (asking the inter-mediation of CU) or stem directly from the CU itself, always after consultation with the IRC Network. Innovation Cells are by now used to dealing with CU, they trust the work done and agree and appreciate the collaboration actions undertaken, therefore they are keener to accept proposals that come from CU rather than from individual IRCs.

The role of the Thematic Groups

The Central Unit has also widely promoted the Thematic Groups as a preferential channel of communication with the Innovation Cells. The TGs represent the natural link with the EU RTD Thematic Programmes and their role could represent the first step towards some degree of decentralisation. Good collaboration relations have already been implemented by several Thematic Groups, in particular by the Biotechnology Thematic Group; ICT Thematic Group; Fish Thematic Group. The Innovation Cells have been participating in Thematic Groups meetings: these meetings allow both for raising awareness of the activities of IRCs and for exchanging RTD / TO profiles. In the future, it is envisaged that Thematic Groups will improve their visibility vis-à-vis the Innovation Cells, through a better marketing of their services, and by demonstrating their role in the dissemination of RTD results. CU will support this increase in visibility.

Events

One of the most successful approaches in terms of collecting EU RTD results from the Innovation Cells is by the promotion of TTT. In this case the benefit of sending an RTD result holder to such event is evident. When proposing an event to the Innovation Cells IRCs should ensure that the following criteria are met:

- The event is IRC wide, that is more than one IRC is involved in the organisation of the event.
- That the potential for success is increased by hosting the event at a high profile International Fair.

It is clear that Thematic Groups are usually the originators of such events. Therefore it is possible that in the next period a list of major events will be produced by each thematic group (2 or 3 per group) and these events will be officially promoted to the Innovation Cells. Once again the speaking with one voice approach should be applied when promoting such events to the Innovation Cells and the EU RTD Programmes. Other concrete suggestions comes from the IRCs experience:

- To always produce electronic material that can be transferred by the Innovation Cells to their colleagues
- To always indicate clearly the specific fields covered by the event
- To always highlight the high level of dissemination potential (use of media, wide promotion, etc.)

Conclusions

The above approaches are the standard ones used presently when working with the Innovation Cells. Of course this list is not exhaustive and IRCs are very welcome to propose new and more suitable approaches. If an IRC wants to propose a different way to obtain RTD results, we would suggest using a 'clustering approach', by involving other IRCs that have an interest in piloting the new methodology. Updated information provided to CU on the development and outcome of the new initiative will be used to record good practices and eventually apply them to the rest of the network.

14.4 WAYS OF PROCESSING THE RTD-RESULTS RECEIVED

What kind of information IRCs are looking for?

As stated initially, in order to perform task 2 of their contract, IRCs need first of all to receive indication of EU RTD results suitable for third-party exploitation. Suitable means

- That the result is innovative & valuable
- RTD performers have the intention and the right to transfer the result to third party for exploitation.

Technical Implementation Plan (TIP)

The main source of information available to the Innovation Cells for the selection of suitable EU RTD results is the Technology Implementation Plan (TIP), a document containing information on the intention of exploitation of the results. It is a contractual obligation for the RTD performer to submit this document to the Project Officer as a deliverable in the course of the project. In the TIP, the RTD performer is obliged to indicate whether he/she intends to proceed with the 'third-party exploitation' of the result and in which modalities.

Problems with TIPs

The identification of RTD results 'suitable for the IRCs' is based both on the information contained in the TIP and on the project officers' judgement. The more accurate and close to reality the content of the TIP is, the most likely it is that the result 'suitable' for IRC support will be correctly identified. But, there can be problems if:

- The TIP has not been drafted carefully
- The information contained is from the early stages of the project and was never updated
- The project officer is not completely aware of what technology transfer and innovative means in terms of the IRC network

In such cases, it is possible that the project selected by the official as suitable for IRCs, is actually not relevant to the IRC services: the coordinator has no intention at all to undertake a technology transfer, or he already has his own contacts, etc.

Identifying possible TTT

The role of the IRCs is the dissemination and exploitation of EU RTD result, but not before verifying that the information transferred is reliable. This is why a specific procedure has been established. Once the RTD result

details are transferred from the Innovation Cells to the CU (or to any other subject representing in that situation the Network - Thematic Group chairperson, etc),

- The latter will identify, contact and informed the local IRC about the RTD performer/company contact details
- The local IRC will then contact the RTD result holder located in his region in order to verify primarily his/her real interest in the transfer of the RTD result through a technology offer. This contact should include a company visit.
- If the technology fulfils all the criteria set the a technology offer should be produced using the TOTR guidelines and disseminated to the network whether through the BBS, TTT events, Thematic Groups etc.

Feedback to the CU
For recording purposes, CU would welcome any kind of follow-up information (BBS entries, EoIs received, negotiations started, TT agreements obtained): the information will be passed to the relevant Project officers, Innovation Cells and TG Chairpersons.

Added Value of the IRC Network
The IRC Network provides a quality check:

- It guarantees that information on the RTD results in the BBS is reliable, that there is a real interest in third party exploitation of the RTD result;
- It assures that the possible technology transfer obtained by these results will be publishable (since 2 IRCs will have to be involved: the one contacting the local RTD holder and the one responding to the TO with an expression of interest);
- It also allows IRCs to get to know and visit innovative companies that could need the IRCs' services also in the future, also for the exploitation of other projects.

14.5 FURTHER SUGGESTIONS FOR WORKING WITH THE INNOVATION CELLS

From the direct experience of some IRCs in the contact with the RTD result holder, the following suggestions have been made:

- IRCs should always mention to the RTD performer contacted that his/her contact details have been provided by the Commission / Project officer who has reckoned a possibility for the IRC service to be of help. This approach should not be underestimated, since it provides IRCs with an extremely powerful access key to their potential clients. Many IRCs have recognised the value of this approach and its positive impact on recruiting new 'clients'.
- When dealing with RTD result exploitation, the coordinator of the IRCs is not always the best person to speak to. If the project officer has not indicated clearly the person owning the exploitation rights, IRCs should try to get in contact with the marketing person within the company, the person interested in the commercialisation of the results. It will be easy to transform the 'researcher wording' into the 'end-user wording' – that is what needed to write a TO from an RTD result.
- If the company visited has agreed on the drafting of a Technology Offer, the IRC entering it into the BBS should tick the appropriate box about the source of the TO and select the 'FP4/FP5' option. This indication will allow IRCs undertaking an advanced search by keywords, to identify all TOs coming from RTD projects contained in the BBS. They will be displayed altogether, generating in fact an IRCs' RTD results database.

Other kind of collaborations: Accompanying Measures
Some IRCs have been successful in submitting proposals for the Accompanying Measures of RTD programmes. These measures should be regarded by IRCs as an opportunity to co-finance specific actions for the exploitation of EU RTD results. In order to make this opportunity more visible, CU will start providing information when new calls come out (the remaining calls related to FP5 and the new ones related to FP6). If the project officers involved in the proposals are aware of the IRC Network and its expertise, the proposal has a chance to be evaluated positively. Therefore past experience has shown that does not harm to let the CU to know about the submission of such proposals. For a

successful example of Accompanying Measure for support to EU RTD result exploitation, please see the presentation of IRC South Germany on the IRC Web
(http://www.ircnet.lu/docs/library/Ingemanson_Exploit_EU_RTD_SEZ.ppt)

Supporting the definition and drafting of the Technology Implementation Plan

The IRCs are now positioned as 'follow-up action' providers, i.e.: experts acting in the final phase of the RTD process, when the final result is achieved. There is another 'niche' within the RTD & Innovation map, besides the function described above, that IRCs could also provide advice on the content of the TIPs. At the moment none of the existing European networks is officially in charge of assisting RTD performers in this phase, even though the existing need of support in this part of the project has been widely recognised. IRC staff are in daily contact with the technology operators, the technology market trends and technology needs Europe-wide, have the necessary expertise to foreseen the possible different applications of an EU RTD result, beyond the self-exploitation use. IRC staff may present to the RTD performer the different options of exploitation of the future project result, extending in such a way the beneficial impact of RTD projects results to a European wide level. During the e-TIP seminars, the Scientific Officers/Innovation Cells have admitted the existence of this need and shown quite a high interest in the eventual possibility of the IRC Network to provide support for the drafting of the TIP.

14.6 RTD RESULT INFORMATION ON THE IRC WEBSITE

- CU is constantly publishing updated information on the IRC Web site, a few locations in the website contain key information on this subject:.
- *Discussion Forum*: a specific session is dedicated the IRCs
- *Library*: under 'CU doc/Relations with other networks/Innovation Cells' IRCs may find:
    - All document related to the pilot action and other initiatives launched
    - The tables listing all RTD projects transferred by Innovation Cells to IRCs, with an indication of the local IRC contacted, the date, the kind of support requested and the feedback by the IRC on the actions undertaken.

It is very important that these tables always contain updated information, since they are also used to give feedback to the Innovation Cells and the relevant project officers on the outcomes of the IRC actions. IRCs should therefore make an effort to keep CU informed of developments of these contacts, from the production of a Technology Offer up to the starting of negotiations and hopefully the signature of an agreement.

14.7 PROVIDING INFORMATION

When RTD results are transferred to the IRC Network, whether via CU, or via Thematic Group or again via other actors, two principles should always be followed:

- The local IRC should always be directly informed. If visiting the RTD result holder, the IRC should provide timely feedback on the actions undertaken. This info will be put on the Web
- The whole IRC Network needs to be kept informed: the discussion forum can be used for this purpose directly by IRCs. Otherwise tables of RTD results are and may be published on the web library by CU.