ITN planning meeting - am

Agenda:

1) Introduction to ITN call, terminology and dates
2) Feedback from last proposal
3) Guide for Applicants
4) Science focus and work packages
5) Discussion of Methodology
6) Grading of projects
7) Assigning resources to nodes
　　　　lunch

Results of ITN round 2011 [2010]

Overall Statistics:

Number of proposals submitted: 919 [863]
Number of proposals on status A: 84   [63]
Number of proposals on status B: 24   [16]
Number of proposals on status C: 387 [423]
Number of proposals on status D: 413 [355]

9 [7]% success rate

LHCphenonet	92.6%

MCNet	89.8%
PROTEVS	89.0%
ARTEMIS	89.0%
INVISIBLES	87.8%
FLAVIANET	87.6%

INVISIBLES	94.2%

MCNet	93.6%
PROTEVS	89.0%
ARTEMIS	81.6%

2011

Next round: deadline January 12

Good news is that budget is foreseen to be bigger

€ 423.23 million [318.41 million]

=> expect O(**120**) networks to be funded

Bad news is that there will be **many many** applications.

Reapplications will have benefit of feedback from last year.

Also, some funding (**€ 20 million)** reserved for a new type of network – European Industrial Doctorates

Expect to have to score **95+**% (**4.7+** on each of the criteria)

Likely timescales:

- ❖ Submit proposal 12 January 2012

- ❖ Indicative feedback in May 2012

- ❖ If successful, contract signed with EU for network to start ~ January 2013

- ❖ Expect first recruitments summer 2013

FEEDBACK FROM LAST PROPOSAL

Criterion 1. S&T QUALITY (Threshold 3.00/5.00)

Mark: 4.30 [4.40]

Strengths:

 The S&T objectives of the research programme are very timely in order to fully exploit the potential of LHC.

The scientific quality of the research programme is very good, and the network members comprise most of the leading figures in the field in Europe.

The research methodology and approach are relevant.

Knowledge of the state-of-the-art is well exposed in the proposal.

The contribution of the private sector and associate partners to the research is meaningful and relevant..

Weaknesses:

 Although the proposed research programme is extremely useful and timely, **the topic as such is not particularly original or innovative.**

The links to mathematics and mathematical physics, and the potential benefits to simulations in other branches, are only briefly mentioned, and these are not developed any further.

The current experimental status and the theoretical expectations are summarized only in a cursory manner.

Comments:

 The proposal is of high scientific quality, involving leading experts of the field. Although very useful and timely, **the proposal is not particularly original or innovative**.

Criterion 2. TRAINING (Threshold 4.00/5.00)

Mark: 4.40 [4.50]

Strengths:

The quality of the proposed training programme is very good. The training programme, which involves all the partners (including the private sector), is consistent with the research programme

The training comprises local training, network-wide training and complementary training. The programme is adequate to the capacities of the hosts.

The overall plan for secondments of significant length is appropriate.

The training programme is very timely.

Weaknesses:

The contents of the local training and the secondment projects are described on a too general level.

The role of the short-term ESRs in this proposal is not explained.

Comments:

Given the recent start of the LHC and the connected boost in experimental knowledge in high energy particle physics this training programme is certainly highly relevant and needs to be pursued now..

Criterion 3. IMPLEMENTATION (Threshold 3.00/5.00)

Mark: 4.70 [4.30]

Strengths:

The capacities of the network to achieve the research training programme goals are excellent. Different kind of organizations are involved (universities, research centres, private sector), which provides the ESRs with experience from complementary research environments. The scientific quality and the supervision experience of the researchers at the nodes are very high.

The structure and the management of the training programme are very well planned.

The private-sector partners are contributing to the training programme at a high level.

Networking and dissemination are well planned. The recruitment strategy is transparent. .

Weaknesses:

Comments:

The capacities of the network to achieve the research training programme goals are very good.

Criterion 4. IMPACT (Threshold 4.00/5.00)

Mark: 4.50 [4.60]

Strengths:

The proposed training programme is well structured, and provides the ESRs with very high scientific level skills and multi-faceted competencies.

The training programme contributes positively to initial research training at the European level, and enhances public-private sector collaborations.

Mutual recognition of the acquired training is foreseen.

Weaknesses:

The outreach activities, although considered in the proposal, have not been specified in a sufficiently explicit manner.

Comments:

The future career prospects of the ESRs are good. Given the start of LHC data analysis, the project will have an important impact.

GUIDE FOR APPLICANTS

INITIAL TRAINING NETWORKS

Purpose

The ITN action aims to improve career perspectives of researchers in the first five years of their research career, in both public and private sectors, thereby making research careers more attractive to young people. This will be achieved through a trans-national networking mechanism, aimed at structuring of the existing high-quality initial research training capacity in Europe.

Content and scope

Direct or indirect involvement of organisations from different sectors, including (lead-) participation by private enterprises in appropriate fields, is considered essential in the action. In particular, the action aims to add to the employability of the recruited researchers through exposure to both academia and enterprise, thus extending the traditional academic research training setting and eliminating cultural and other barriers to mobility.

The **joint research training programme** should respond to well identified needs in defined scientific or technological areas, **expose the researcher to other sectors including private companies, and offer a** comprehensive set of transferable skills (entrepreneurship, IPR, etc.). It should reflect existing or planned research collaborations among the partners, in which the fellow will take part through individual training-through-research projects.

The organisations participating in the network will be expected to **mutually recognise the quality of the training. This should contribute to the structuring effect on European research training** capacities through the establishment of long term collaboration among the teams

Multi-Partner ITNs (Multi-ITNs)

- Minimum participation of participants from 3 EU Member States / Associated Countries;
- Maximum of 500 researcher months per network;
- Minimum of 80% of researcher months for *Early Stage Researchers*;
- Maximum 40% of budget to one country;
- All full partners must recruit and host eligible researchers;
- Participation open to ICPCs (and also to non-ICPCs but only where essential to achieve aims of the project);
- *Early Stage Researchers to be appointed for minimum of 3 months and maximum of 36* months. They will typically be enrolled on a doctoral programme.
- *Experienced Researchers to be appointed for a minimum of 3 months and maximum of 24* months
- Transnational *mobility requirement: fellows must not have resided in country of recruiting* institution for more than 12 months during the previous 36 months;
- Participation of the private sector at the highest possible level
- Secondments of an individual researcher to project partners and/or associated partners up to a maximum of 30% of that researcher's recruitment period;
- Typically 48 month project duration;
- Associated partners from any country.

ITN - Funding Scheme 'Support for Training and Career Development of Researchers': Marie Curie Initial Training Networks			
Criteria			
S&T Quality Threshold: 3 Weighting: 30%	**Training** Threshold: 4 Weighting: 30%	**Implementation** Threshold: 3 Weighting: 20%	**Impact** Threshold: 4 Weighting: 20%
Priority in case of *ex aequo*			
3	1	4	2
S&T objectives of the research programme, including in terms of inter/multi-disciplinary, intersectoral and/ or newly emerging supra-disciplinary fields.	Quality of the training programme. - Contribution and relevance to the training programme of the private sector and, where appropriate, of other socio-economic actors. - Transferable skills offered: entrepreneurship, management, communication, standardisation, management of IPR, ethics, grant writing, take up and exploitation of results, research policy, etc. - Quality of supervision *	Capacities (expertise / human resources, especially regarding supervision/ facilities / infrastructure/private sector involvement) to achieve the research training programme and access of fellows to these resources. Adequacy of task distribution and schedule. Adequate exploitation of complementarities and synergies among partners in terms of research and training, including well targeted secondments to the private sector and to other socio-economic actors where relevant.	Contribution of the proposed training programme to: * - structure training at doctoral level with the acquisition of key skills needed in both the public and private sectors; - improve career prospects and employability of researchers, including ERs where appropriate; - stimulate creativity and entrepreneurial mindset of researchers at doctoral level.

Scientific quality of the research training programme.	Importance and timeliness of the training needs (e.g. multidisciplinary, intersectoral, and newly emerging supra-disciplinary fields)	Private sector involvement at the highest possible level appropriate to the research topic, and sufficient evidence of commitment.	Contribution of the training programme to the policy objective of structuring the initial research training capacity at European level (through establishing longer term collaborations and /or lasting structured training programmes between the partners' organisations).
Where relevant, appropriateness of research methodology and approach.	Appropriateness of the size of the requested training programme with respect to the capacity of the host	How essential is non-ICPC Third Country funding, if any, to the objectives of the research training programme.	The contribution of the training programme towards the policy objective of enhancing public-private sector collaborations in terms of research training.
Originality and innovative aspect of the research training programme.	a) For ITNs and IDPs: Meaningful exposure of each researcher to another sector, in particular through secondments. b) For EIDs: Appropriate time spent by the ESR in each sector.	Networking and dissemination of best practice among partners. Where appropriate, clarity of the plan for organizing training events (e.g. workshops, conferences, training courses).	Where appropriate, mutual recognition by all partners of the training acquired, including training periods in the private sector. *

Contribution of the private sector and, where relevant, other socio-economic actors in the research programme	a) For ITNs and IDPs: Adequate combination of local specialist training with network-wide training activities. b) For EIDs: Adequate supervision arrangements and combination of local specialist training with wide training activities	Appropriateness of the plans for the overall management of the training programme (demarcation of responsibilities, rules for decision-making, composition of supervisory board including involvement of the private sector); also working conditions, transparency of recruitment process and career development. *	Where appropriate, plans for exploitation of results. Impact of the proposed outreach activities.*

Evaluation Criterion	Weighting (in %)	Threshold	Priority in case of *ex aequo*
S&T Quality	30	3	3
Training	30	4	1
Implementation	20	3	4
Impact	20	4	2

In addition to the individual thresholds, an overall threshold of 70% will be applied to the total weighted score.

Size and composition of networks

Normally a network will be composed of at least three participants (multi-partner networks), but mono-partner networks are also possible under certain conditions (see point 2.4.). There is no predefined size for multi-partner networks. However, we strongly recommend that you keep the size of the consortium between 6 and 10 participants since past experience has shown that this is a manageable size.

The overall EU contribution per grant agreement will be limited to the recruitment of a **maximum of 500 researcher months.** The Experts will evaluate the requested number of researcher-months very carefully in the light of the capacities of the host institutions.

2.3 ITN ELIGIBILITY CRITERIA

Partnership: a distinction is made between partners in a network, based on their level of participation.

• **Participants (level 1):**

Participants are organisations that are full partners of a network. They contribute directly to the implementation of the joint training programme of the network by recruiting and employing eligible researchers, by providing specialised research training, complementary training and secondment opportunities. Full network partners are signatories to the grant agreement (beneficiaries), receive funding and take complete responsibility for executing the proposed training programme.

• **Associated partners (level 2):**

Associated partners do not recruit any researchers, but provide research and complementary training and secondment opportunities. Associate partnership is open to both public and private sector organisations. They are not signatories to the grant agreement. However, each associated partner must include a letter of commitment in the proposal to demonstrate their real and active participation in the network. The role of the associated partner should be clearly described in the proposal.

Associated partners cannot claim directly any cost to the project. They would need to invoice full network partners for costs related to the activities in the research training programme.

All partners (level 1 and level 2) participate in dedicated network activities as well as in the supervisory board. Both public and private sector organisations can take part in an ITN either as a participant or as an associated partner.

In fields that are known to have interactions with the private sector, proposals are likely to receive a less favourable assessment if they do not provide for private sector participation at level 1. For fields not normally having interactions with the private sector, its involvement should be at level 2.

3. Eligible researchers

The main aim of the ITN is the training of early-stage researchers (ESR) and it includes *inter alia training in the context of doctoral programmes. As a general rule, early-stage researchers* must be recruited in significantly higher proportions compared with experienced researchers (**ER).**

Typically the share of ESR researcher months must be at least 80%.

ESR's

Early-stage researchers must be, at the time of recruitment by the host organisation, in the first four years (full-time equivalent) of their research careers and have not yet been awarded a doctoral degree. This is measured from the date when they obtained the degree which would formally entitle them to embark on a doctorate, either in the country in which the degree was obtained or in the country in which the research training is provided, irrespective of whether or not a doctorate is envisaged.

The length of individual appointments for an ESR will be at least 3 months up to a maximum of 3 years within a network.

Appointments for the maximum 3 year period are encouraged, particularly in the context of EID and IDP.

ERs

Experienced researchers must, at the time of recruitment by the host organisation, be in possession of a doctoral degree, *or have at least four years and less than five years of full-time* equivalent research experience.

The length of individual appointments for an ER will be at least 3 months up to 2 years within a network.

The initial training can also, to a limited extent, be directed to experienced researchers as long as they are within the first five years.

The experienced researchers are encouraged to be recruited and trained in the private sector, with special attention being given to SMEs, in order to develop their management and entrepreneurial skills (organisation of the planning of secondments, setting-up collaboration with other institutions, coaching of ESRs, etc...).

It should be noted that an individual researcher may not be recruited first as an ESR and subsequently as an ER in the same network.

Training activities

Networks will **primarily develop a dedicated** and high level joint research training programme **that** focuses upon promoting scientific excellence and exploiting both the specific expertise and infrastructure of the participating partners and the collective expertise of the network as a whole. These training activities will address in particular the development and broadening of the research competences of the early-stage researchers.

Such training activities might include:

Primarily, carefully supervised **training through research** under supervision by means of individual personalised projects within the frame of the research topics defined by the network;

Provision of structured training courses (e.g. tutoring, lecture courses) that are available either locally or from another participant of the network within the framework of the joint training programme; **local training programmes between the participants are expected to be coordinated** to maximise added value (e.g. joint syllabus development, opening up of local training to other network teams, joint Ph.D. programmes, etc.);

Training activities cont.

Exchanging knowledge with the members of other teams in the network through undertaking **intersectoral visits and secondments**;

Development of **network-wide training activities** (e.g. workshops, summer schools) that exploit the interdisciplinary and intersectoral aspects of the project and exposure of the participants to different schools of thought.

Invitation of visiting researchers originating from the public or private sector. This would be aimed at improving the skills and know-how of the fellows and should be duly justified in the context of the training programme. The network can cover costs of visiting researchers under cost category 3.

Further training activities with a particular view to widening the career prospects of the researchers would include:

Organisation of courses to provide transferable training both within and outside the network. Topics of interest would include entrepreneurship, management, communication, standardisation, management of IPR, ethics, grant writing, take up and exploitation of research results, research policy, etc.

Involvement in the organisation of network activities and other aspects such as proposal writing, enterprise start-up, task co-ordination, etc;

Experienced Researchers:

Training activities specifically for experienced researchers would be:

- Intersectoral or interdisciplinary transfer of knowledge, training in new techniques,

- Capacity to build collaborations,

- Taking an active part in the management of the research project,

- Developing organisational skills through organisation of training events,

Where a network seeks funding to appoint **ERs, it must still be in the context of a research training** programme. In these cases the training which is particularly directed at the ERs must be made clear and the expert evaluators must be able to see from the proposal how the opportunities offered within the network would be exploited for the career enhancement of these ERs, both in terms of research and transferable skills training appropriate to their experience. Training of such ERs should aim at making them more independent and providing them with the skills to become team leaders in a near future.

Visiting Researchers

To complement the network capacity to transfer new knowledge and strengthen supervision of the network-wide training activities, **a number of visiting researchers originating from the public or** private sector can be invited. Any participation of the visiting researchers in the network should be aimed at improving the skills and know-how of the fellows and should be duly justified in the context of the training programme. The network can cover costs of the visiting researchers under cost category 3.

Networking & Other Training activities

Each network will be **expected to organise workshops, seminars, summer schools**, etc. which should be directly related to the research training programme of the network. Content and quality of such events should be detailed and fully justified in the proposal.

Networking activities could further include:

- **Organisation of scientific or managerial network meetings**.;
- **Visits and secondments** between full network partners and associated partners for the purpose of exchanging knowledge;
- **Invitation of external experts** for specialist inputs into the joint research training programme;
- **Attendance of the recruited researchers at international conferences** and workshops in order to represent the network and disseminate its research**;**
- Electronic networking via the active use of Internet, Email and video conferencing;
- **Collaboration with other ITNs** in similar or complementary fields is also encouraged for exchange of "best practice", and transfer of knowledge;
- **Organisation of a final network conference which would be widely publicised and showcase the achievements of the network**.
- **Training events offered within the network (summer schools, specialised training courses, seminars, etc) which may also be opened to external researchers**

Financial model

- Category 1 – **monthly living allowance**
  - **38k/year** for ESR, **58.5k/year** for ER (employment contracts) + country correction factor – social security
- Category 2 – **mobility allowance**
  - **0.7k/month** single, **1k/month** with family
- Category 3 – Contribution to the **training** expenses of eligible researchers and **research**/transfer of knowledge programme **expenses**
  - **1.8k/month**   ~**900k** for network as whole
- Category 4 – **management** 10%
- Category 5 – **overheads** 10%

THE NEW NETWORK

Science focus

- The period of the network has to be when electroweak symmetry breaking is finally understood
  - If Higgs discovered, then identification of which Higgs it is
  - If Higgs not discovered, then identification of alternative electroweak symmetry breaking mechanism
  - => HIGGSTOOLS

Unique opportunity

- Assembling the right theorists and the right experimenters gives New Synergy at the right time

developing the right tools

Theory

Experiment

using the tools to interpret the data
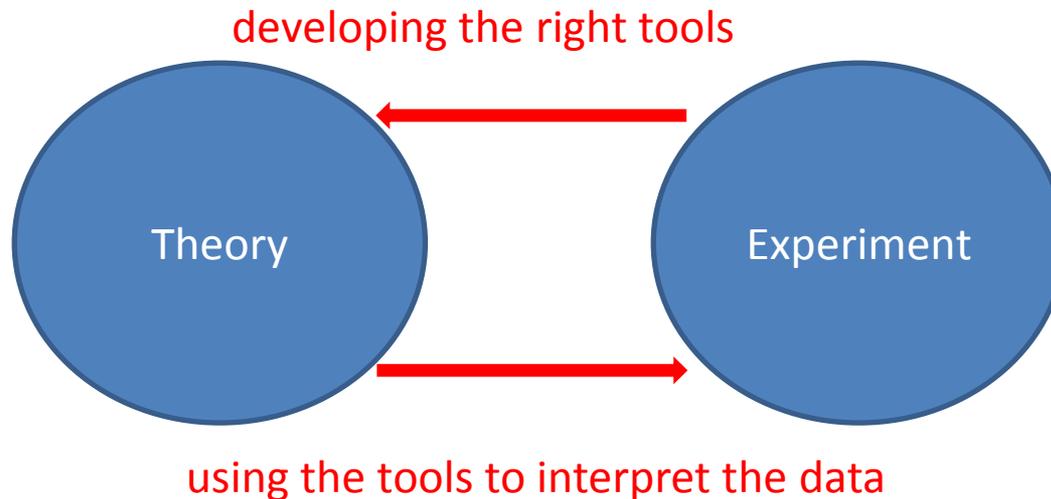
- Both theory and experiment must be visible in the proposal

Strengths of the network

- **A multidisciplinary approach**
- **Complementarity and synergy of research**
- **World-leadership in all relevant areas**
- **Overcoming the fragmentation of European research**
- **The pivotal support of experimental physics**
- **Timeliness**
- **Strong integration of individual ESR training and research**

Number of nodes?

- There are potentially 12 nodes
  - GB1 (North), D1 (North), D2 (South), CH, IT1(North), POL, FR, GR, NL, ES
  - GB2 (South), IT2(South)

- "we strongly recommend that you keep the size of the consortium between 6 and 10 participants"

- Associated Partners/Subnodes

Length of recruitments

- "Appointments [of ESR] for the maximum 3 year period are encouraged, particularly in the context of EID and IDP."
  - Can only have 13x36 month ESR!
  - Sharing resource within node
  - Top-up with local resource?

  - ER v ESR

Work packages

For discussion:

Last time:
- – WP1 Extreme Computation Tools
- – WP2 Precision Calculations for the Terascale
- – WP3 Discovery Physics at the Terascale
- – WP4 Support of LHC experimentalists

Projects

- 30 projects
  - Mix of theory oriented and experiment driven
  - Many have networking aspect
  - Many link theory and experiment
  - Give idea of how each group could contribute
- How to map on to work packages?

- How to map onto nodes?

Resource allocation

- Would like to use grading of projects to inform allocation of resource

  – Is there an alternative way?

- Would like to agree rules for doing this before looking at gradings

- Would like agreement that willingness to participate is independent of resource allocation