



# DOING BUSINESS WITH ESA

## An Introductory Presentation

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# Doing Business with ESA, an Introductory Presentation



## The European Space Agency

- The idea of an independent European Space Agency dates back to the early 1960s
- ESA was formed in 1975, replacing the satellite and launcher organisations ESRO and ELDO
- The ESA Convention entered into force in October 1980.
- ESA has today 17 Member States

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## The ESA Member States

- Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Norway, the Netherlands, Portugal, Spain, Sweden, Switzerland, and the United Kingdom
- Hungary, the Czech republic, Romania and Poland are European Cooperating States
- Canada takes part in a number of projects under a cooperation agreement

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## ESA Programmes

### → Mandatory:

- ◆ Scientific Programme
- ◆ General Budget (e.g. the Technology Research Programme – TRP, the General Study Programme - GSP)

### → Optional:

- ◆ Human Space Flight and Exploration
- ◆ Microgravity research
- ◆ Earth Observation
- ◆ Telecommunications
- ◆ Satellite Navigation
- ◆ Launcher Development

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## Funding of ESA Programmes

- The mandatory activities are funded by a financial contribution from all ESA Member States, calculated in accordance with each country's gross national product.
  - Each Member State decides in which optional programme they wish to participate and the amount they wish to contribute above an estimated minimum.
  - ESA's budget for 2005 was 2.9 billion Euro. Close to 90% of this budget is transformed into contracts with European industry mainly for research and development activities.
  - The main principle for placing of these contracts is open competition. The Agency also operates on the basis of geographical return, i.e. it invests in each Member State, through the industrial contracts for space programmes and activities, an amount more or less equivalent to each country's contribution.
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## Main Steps to set up an Optional Programme

- 1. Programme Proposal by the Director General**
- 2. Enabling Resolution adopted by Council**
- 3. Drafting and subscription of a Programme Declaration by interested Member States; the participants**
- 4. Programme Implementing Rules adopted by Council**
- 5. Implementation of the Programme by ESA, annual budgets, procurements, reporting and completion.**

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## Running the Programmes

- The Programmes are managed under the DG's authority, in accordance with ESA rules and regulations and with the implementing rules
  - Major decisions are taken by the participant meetings in the Programme Boards\*) expressly mandated by Council
    - \*) Programme Boards:
      - ◆ Telecommunications
      - ◆ Earth Observation
      - ◆ Launchers
      - ◆ Human Space Flights and Exploration
      - ◆ Navigation
      - ◆ Science
-

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## Running the Programmes: Contracts

- Voted annual budgets are put to execution
- Procurement Policy is approved by the Industrial Policy Committee
- Contracts are awarded by the DG
- The Contract (underlying law is the national law of the country where the Contractor is resident) and the General Clauses and Conditions for ESA contracts establish the legal baseline between ESA and the Contractor

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## European Cooperating States (ECS) => towards accession to ESA as Member States

The Plan for European Cooperating States (PECS) Charter establishes a list of activities to implement in each ECS (5 year-plan for 5 MEuro) to create and strengthen industrial capabilities so as to allow a fair and equitable participation in future ESA programmes.

### Some examples:

- Hungary (Apr. 2003): Earth Observation Envelope Programme (EOEP), Technology Research Programme, PRODEX, Science (e.g. activities for Rosetta, MARS Express, Venus Express, Cluster), PROBA
- Czech Republic (Nov. 2003): Global Monitoring for Environment and Security (GMES) Service element, General Support Technology Programme (GSTP), Earth Observation Envelope Programme (EOEP), Satellite Navigation (e.g. EGNOS)
- Romania (Feb. 2006): Science (e.g. activities for Herschel/Planck, GAIA, SOHO, Cluster, Venus Express), *European Life* and *Physical Sciences* and applications utilising the International Space Station (ELIPS)
- Poland (Apr. 2007): one year time to define a plan of activities

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## EMITS

- **EMITS is ESA's web-based system for publishing (competitive) Invitation to Tenders (ITT). It includes inter alia:**
  - ◆ **A list of intended ITTs: potential bidders may declare their interest and see which other companies have done the same**
  - ◆ **Many technical, administrative and contractual standards and documents (General Tender Conditions, General Clauses and Conditions for ESA Contracts, PSS-A forms, engineering standards etc)**
  - ◆ **Competitive ITTs**
  - ◆ **Competitive ITTs published by ESA on behalf of other entities**
- **Request for Quotation (RFQs) is the term used for direct negotiations.**

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## EMITS Registration

- All Companies, Institutes and Universities that wishes to do business with ESA are required to register as “potential bidders” and EMITS users.
- All the relevant information can be found on:  
<http://www.esa.int/industry>

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## General Structure of ITTs and RFQs

→ The procurement package consists of:

- ◆ Cover Letter
- ◆ Technical and Management Requirements (Statement of Work – SOW)
- ◆ Special Tender Conditions
- ◆ Draft Contract

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## ESA's General Procurement Rules

- These rules are given or referred to in the package and are designed to achieve objectives of:
- ◆ Technical Quality
  - ◆ Fairness and impartiality
  - ◆ Economy
  - ◆ Industrial Policy

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## Technical Quality

→ With respect to technical quality it should be underlined that  
ESA:

- ◆ Is a technically oriented organisation
- ◆ Strives at achieving technical excellence by:
  - Setting detailed technical requirement
  - Assessing the proposed technical approach in every detail
  - Deploying the highest level of technical experts in performing such assessment
  - Monitoring the activity with the same level of expertise and,
  - Accepting the deliverables against the above mentioned strict requirements

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## Fairness and Impartiality

### Tender Evaluation Board (TEB) / Composition and Status

- A TEB is appointed for all ITTs and major RFQs.
  - **Composition:**
    - ◆ Technical experts from the fields concerned
    - ◆ Legal/commercial expertise
  - The Board composition represents a balance of participants from inside and outside of the initiating department.
  - All participants to the TEB sign a secrecy form and a statement of non-interest.
  - All are appointed in their own capacity and do not report to their hierarchy in performing the TEB activities.
-

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## Fairness and Impartiality – TEB Activities

- ➔ **The TEB reviews and approves the procurement package with the following main considerations:**
    - ◆ **Quality of the requirements**
    - ◆ **Fairness of the competition**
  - ➔ **The TEB further:**
    - ◆ **Evaluates the proposals against the evaluation criteria published in the Special Tender Conditions. No comparison between proposals is made. Only information provided in the proposal itself is considered.**
    - ◆ **Ranks the proposals received by applying the weighting factors established by the TEB prior to ITT issue.**
    - ◆ **Recommends a company for contract award. Depending on the nature /size of the activity the decision is taken by the responsible ESA Director, the Agency's Adjudication Committee (AC) or the Industrial Policy Committee (IPC)**
-

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## Economy

- When making the final recommendation the TEB is considering value for money.
- The ESA Convention states that its budgets must be used most economically.
- Price is consequently a factor of the competition and will, among other aspects, be considered by the Agency's management when taking the final decision.

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## Industrial Policy

→ **The Agency's industrial policy objectives are:**

- ◆ **To ensure that all Member States participate in an equitable manner corresponding to their financial contribution**
- ◆ **Improve the worldwide competitiveness of European Industry by encouraging the development of an industrial structure appropriate to market requirements, making use of existing industrial potential of all Member States**
- ◆ **Maintain and develop space technology in a cost-effective manner**
- ◆ **Benefit from competition**

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## The ESA SME Initiative

- ➔ **The companies involved in ESA's activities fall mainly into two categories.**
  - ◆ **Large System Integrators (LSI), mainly acting as “Primes”**
  - ◆ **A wide range of companies, including subsidiaries of LSI, independent equipment suppliers, small system integrators, fully independent small- and medium sized enterprises (SME), R&D institutions etc.**
- ➔ **The SME initiative comprises a whole set of measures to open up opportunities for them to work more intensively with ESA and space contractors.**

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## The ESA SME Initiative

### → Examples are:

- ◆ Announcements of Opportunities where part of the budget is reserved for SMEs
- ◆ **SineQuaNet**: an expert network providing technical and engineering support to SMEs in ESA Member States and European Cooperating States, who already are operating in or wanting to enter the space sector. Initiated at the end of 2005 by ESA's SME Unit, is co-financed by the EC Directorate-General, Research and Technology. The network is expected to be fully operational from the beginning of 2008
- ◆ **ARTES 5** programme through its:
  - SATCOM initiative tailored to encourage SMEs and start-ups

Concerning the SME Initiative, ESA should be contacted via:

**SME-UNIT@esa.int**

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## Special Clauses in the Procurement Policy

- **C1: Activities reserved to Non-LSI and SMEs**
- **C2: Activities subject to subcontracting Clause in favour of non-LSI and SMEs**
- **C3: Activities restricted to SMEs and R&D Organisations**
- **C4: Activities with Sub-contracting clause to SMEs only**

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## Measures to Ensure Fairness of Work Distribution

### → Code of Best Practices:

A set of procurement rules ensuring the fairness of the selection of subcontractors by Primes in ESA's Major Procurements.

### → EMITS for external entities

ITTs issued by External Entities (e.g. a prime contractor for a major project) are published on EMITS to ensure full transparency and visibility

### → The ESA Industrial Ombudsman

Mediates in disputes between industry in the frame of ESA project procurements and technology development procurements

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## Ensure Participation in ESA Programmes

- Review EMITS ITTs regularly
- Pay special attention to the special clauses C1-C4 and also to announcements made on EMITS under “Entities”
- Communicate your interest, via EMITS, to participate in the corresponding ITTs
- Contact potential partners identified via EMITS
- Respond to Invitations to Tender announced via EMITS
- Acquire and maintain an up-to-date knowledge of ESA’s programmes, activities, organisation and methods of operation

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## Contract Award

- Award of ESA contracts require
  - **high quality proposals**
- This course will assist you in this.
- Important in the learning process will also be to request a briefing following an unsuccessful proposal submission.
- It helps to improve the quality of subsequent tenders.



THANK YOU

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# ESA Training Courses for Industry

## Writing a good technical and contractual proposal in response to an ESA Invitation To Tender (ITT)

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# TENDER PROCEDURE (Competitive)

➤ Once introduced in the ESA Work-Plan for a given programme, all envisaged (competitive) procurement actions are published through EMITS under the “List of intended Invitations to Tender”.

o Through the list, potential bidders can access general information regarding a given activity, such as technical abstract, price range, type of programme, geographical return information, technical contact person, etc.

# TENDER PROCEDURE (Competitive) (continued)

o Potential bidders may also express and record their interest in a given activity, show their field of specialisation and indicate their availability to team up with other companies as prime contractor or subcontractor: based on the public information available in this section, potential bidders may already decide to explore possibilities to team up with others.

# TENDER PROCEDURE (Competitive) (continued)

- During this phase, i.e. prior to the issuing of the ITT (Invitation to Tender), potential bidders are free to contact the Agency's responsible technical services in order to obtain additional technical details or clarifications.



# TENDER PROCEDURE (Competitive) (continued)

- As soon as the ITT is ready and internally approved it is published through EMITS under “Open Invitations to Tender”.
- Potential bidders having declared their interest are automatically informed of the publication of the ITT.

# TENDER PROCEDURE (Competitive) (continued)

- o The tender action is, however, open to all potential bidders qualifying for participation under the relevant programme rules (please refer to the List of intended Invitations to Tender **and** to the Cover Letter of the ITT)
- o Once the ITT is published, contacts with the Agency regarding the activity can exclusively take place through the responsible contracts officer whose name is shown on the Cover Letter.

# TENDER PROCEDURE (Competitive) (continued)

- During the tendering period, potential bidders have the right to contact the Agency's responsible contracts officer, in writing (preferably by fax, e-mail not recommended), to:



# TENDER PROCEDURE (Competitive) (continued)

- o Request clarifications regarding the ITT (Cover Letter, Statement of Work, Draft Contract, Special Conditions of Tender);
  
- o Request, with due justification, extensions of the tendering period and hence the postponement of the closing date (NOTE: the decision on whether such extensions may be granted are at the Agency's sole discretion).

# TENDER PROCEDURE (Competitive) (continued)



- The Agency's responsible contracts officer, in coordination with the Tender Evaluation Board and the technical initiating services, will address every request and answer to it: information deemed to be of interest to all potential bidders, as well as extensions to the closing date, will be published on EMITS as an official clarification to the ITT.

# TENDER PROCEDURE (Competitive) (continued)

➤ The closing date shown in the Cover Letter indicates **the time limit** (day and hour, usually 13:00 hours) by which the proposals submitted by bidders must be **physically in the hands of the ESA establishment's Mail Registry**:



○ Proposals received after this time limit will not be admitted for evaluation and returned to bidders unopened.

# TENDER PROCEDURE (Competitive) (continued)

➤ Tenders received within the allowable time limit are subject to an initial screening by a Tender Opening Board, aimed at verifying “prima facie” that every proposal is overall complete and compliant with the main requirements (e.g. price and price type, statements of technical and contractual compliance, etc.) laid out in the ITT.

○ Proposals not in line with one or more of said main requirements may be discarded and not be admitted for evaluation at this stage.

# TENDER PROCEDURE (Competitive) (continued)

➤ Admitted proposals are then evaluated by the Tender Evaluation Board against the Evaluation Criteria announced in the ITT and marked according to the following scale:

- 100 Perfect
- 90 Excellent
- 75 Very Good
- 60 Good
- 50 Fair
- 40 Barely Acceptable
- 0 Worthless

# TENDER PROCEDURE (Competitive) (continued)

➤ Based upon the overall results of the evaluation, following the marking of each proposal by evaluation criterion, the application of the relevant weighting factors and the calculation of the overall weighted mark for each proposal, the TEB formulates a recommendation to place a contract.

o additional factors, such as price and/or specific measures affecting the activity subject of the ITT are also taken into account.



# TENDER PROCEDURE (Competitive) (continued)

- Once the recommendation of the TEB is officially endorsed by the Agency's cognisant Management (or, where applicable, by the Adjudication Committee or Industrial Policy Committee), the selected bidder is invited to a **Negotiation Meeting**.

# TENDER PROCEDURE (Competitive) (continued)

➤ Essentially, the aim of the Negotiation Meeting is to review in detail the selected proposal against the Agency's requirements and Work Statement, ensure that both ESA and the potential Contractor have the same understanding of the above, review the activity's schedule and meeting/Review plan, discuss and negotiate the final contract on the basis of the draft originally attached to the ITT and discuss and negotiate the payment plan.

# TENDER PROCEDURE (Competitive) (continued)

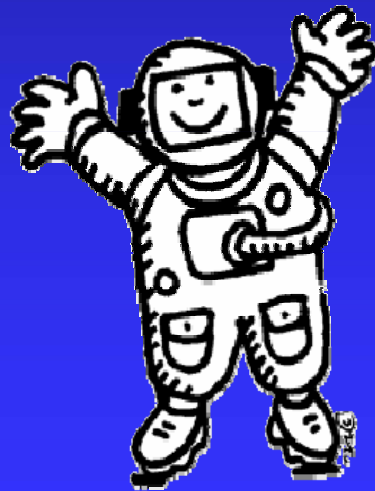
- Following a successful Negotiation Meeting, the activity can be considered as successfully kicked off: the proceedings of the meeting are recorded in detail in the Minutes of Meeting which become an integral part of the resulting contract.

# TENDER PROCEDURE (Competitive) (continued)

- The Agency prepares the final version of the contract and sends it to the Contractor for signature. Bidders whose proposals have not been selected receive a formal notification of the results of the evaluation.

# TENDER PROCEDURE (Competitive) (continued)

- Once the contract is signed by the Contractor and, successively, by the Agency, the activity may legally start.



# TENDER PROCEDURE (Competitive) (continued)

- Bidders whose proposals have not been selected are entitled to a verbal briefing on the evaluation of their proposal:
  - The request should be formally addressed to the Agency's responsible contracts officer;
  - Depending on the level of detail required, the briefing can be carried out by the contracts officer alone based on the contents of the Tender Evaluation Report or in presence of the Agency's cognisant technical experts members of the TEB.

# SPECIFIC PARTS OF THE ITT

## ➤ The Cover Letter (CL)

it contains a number of **essential features** characterising the specific activity covered by the ITT, a.o.:

- The reference to the ESA Programme concerned and to the Activity Item as it appears in the List of Intended ITTs;
- The name of the responsible contracts officer;

# SPECIFIC PARTS OF THE ITT

## (continued)

- Any constraints regarding, e.g., participation by country to the Agency's optional programmes (GSTP, ARTES, etc.);
- Any special Industrial Policy measures (e.g. in favour of SMEs);
- An indication of the envisaged price type (e.g.: FFP, CP to be converted, Cost Reimbursement, etc.);

# SPECIFIC PARTS OF THE ITT

## (continued)

- An indication of the envisaged price range. This indication can either:
  - Be a **rigid** one, reflecting the maximum amount available for the execution of the work. → **Only compliant proposals quoting a price within this limit are admitted for evaluation.**

# SPECIFIC PARTS OF THE ITT (continued)

- Or a more flexible one, representing a **guideline** for the establishment of the price → The price quoted may exceed the figure, if justified. Furthermore:

# SPECIFIC PARTS OF THE ITT (continued)

- It is advisable, as mentioned in the CL in these cases, to split the proposed work into a baseline part, within the earmarked budget figure, and an optional one for the part in excess;
- NOTE: The proposed price is very likely to become a relevant issue when the TEB makes its final recommendation.

# SPECIFIC PARTS OF THE ITT (continued)

- Pointers drawing the bidders' attention to important parts of the ITT, such as:
  - Specific sections of the Statement of Work;
  - Specific articles or conditions contained in the draft contract;

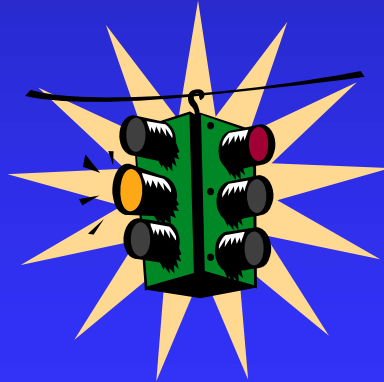
# SPECIFIC PARTS OF THE ITT (continued)

- Parts of the Special Conditions for Tender, giving specific instructions on the expected contents of the Technical, Management or Financial/Contractual Proposal.
- The formal conditions of submission, i.e. the exact duration of the tendering period (usually between 6 and 10 weeks) and the exact date and time (usually 13:00 hours) by which proposals must be physically in the hands of the ESA Establishment's Central Mail Registry.

# SPECIFIC PARTS OF THE ITT

(continued)

➤ PLEASE PAY A LOT OF ATTENTION TO THE CONTENTS OF THE COVER LETTER: THE QUALITY AND COMPLETENESS OF YOUR PROPOSAL ARE AT STAKE !!!



# SPECIFIC PARTS OF THE ITT (continued)

## ➤ The Statement of Work, including Technical and Management Requirements

It can be rightfully defined as the “heart” of the ITT since it describes:

- The objectives of the activity;
- The overall organisation of the work (Tasks, including input, work description and output);

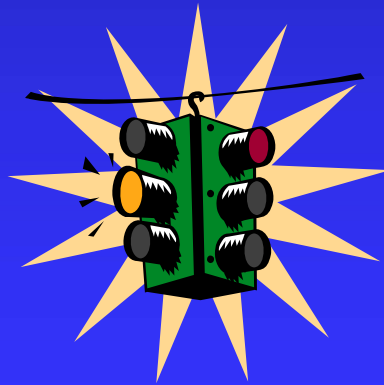
# SPECIFIC PARTS OF THE ITT

## (continued)

- The “product” or “products” to be delivered at the end of the activity;
- Technical requirements to be met, constraints to be taken into account, objectives to be reached as closely as possible, etc.;
- Specific requirements regarding the management of the activity, reporting during the execution of the work, meetings / reviews and deliverables items.

# SPECIFIC PARTS OF THE ITT (continued)

- THE STATEMENT OF WORK AND ITS ANNEXES CONSTITUTE THE BASIS ON WHICH BIDDERS ARE REQUIRED TO ELABORATE IN ORDER TO PREPARE THEIR PROPOSALS.



# SPECIFIC PARTS OF THE ITT (continued)

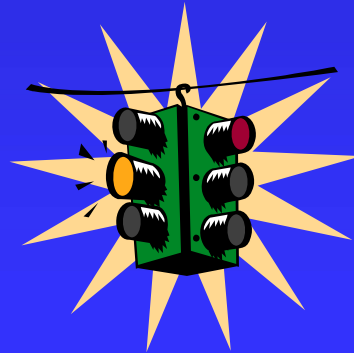
## ➤ The Draft Contract

- Each ITT includes a draft contract, based on the current revision of the **General Clauses and Conditions for ESA contracts** and specifically tailored to the needs of the activity covered by the ITT.
- The draft contract reflects the intended “rules of the game”: **full compliance is expected.**

# SPECIFIC PARTS OF THE ITT

(continued)

- **THE DRAFT CONTRACT MAY CONTAIN CONDITIONS HAVING DIRECT BEARING ON THE WAY THE TECHNICAL PROPOSAL NEEDS TO BE STRUCTURED: THE TECHNICAL PROPOSAL MANAGER, WITH THE SUPPORT OF HIS LEGAL/COMMERCIAL COLLEAGUES, SHOULD TAKE ANY SUCH CONDITIONS INTO ACCOUNT.**



# SPECIFIC PARTS OF THE ITT (continued)

## ➤ The Special Conditions of Tender (SCT)

Together with the **General Conditions of Tender** (covering the more generic and formal aspects), the SCT can be regarded as the Agency's "detailed instructions" on what the different parts of a proposal should contain.

# SPECIFIC PARTS OF THE ITT

## (continued)

- The SCT list strictly follows the expected layout sequence of a proposal (Cover Letter, Technical Proposal, Management Proposal, Cost Proposal, Contractual Proposal, etc.) and provides guidelines or firm requirements on the contents of each of these parts;
- The SCT give, or repeat, additional information regarding, a.o., the expected length of the proposal, the envisaged duration of the work, the available budget, etc.;

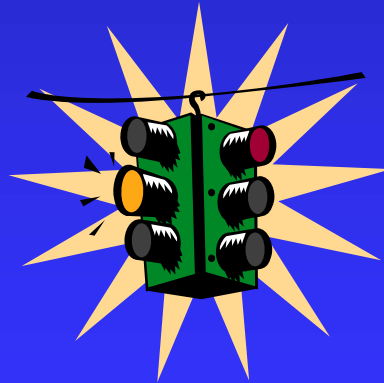
# SPECIFIC PARTS OF THE ITT (continued)

- The SCT also contain a checklist helping bidders to verify, prior to submission, that their proposals are indeed complete;



# SPECIFIC PARTS OF THE ITT (continued)

➤ **THE SPECIAL CONDITIONS OF TENDER CONSTITUTE A VALUABLE TOOL, ENABLING BIDDERS TO CORRECTLY STRUCTURE THE LAYOUT AND CONTENTS OF THEIR PROPOSALS.**



# SPECIFIC PARTS OF THE ITT (continued)

## ➤ ANNEX: The Evaluation Criteria

A set of Evaluation Criteria, summarising the aspects the Agency will take into consideration when evaluating proposals, is associated to each ITT.

Each Evaluation Criterion refers to a specific (set of) ITT requirement(s) and points to a specific part of the proposal

# SPECIFIC PARTS OF THE ITT (continued)

## ➤ ANNEX: The Acknowledgement of Receipt

Bidders downloading a given ITT are invited to return the Acknowledgement of Receipt duly filled in to the responsible contracts officer:

# SPECIFIC PARTS OF THE ITT

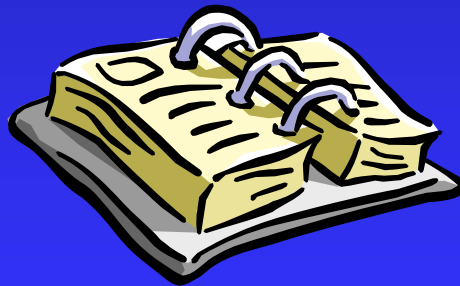
## (continued)

- this helps the Agency in estimating how many proposals can be expected for a given ITT and

- especially for potential bidders not having expressed interest to an activity, ensures that said bidders are promptly informed in case a clarification regarding the ITT is published on EMITS.

# OVERALL STRUCTURE OF THE PROPOSAL

- A good proposal consists of the following, clearly divided parts (or volumes):



# OVERALL STRUCTURE OF THE PROPOSAL (continued)

1. The Cover Letter
  - 1a. (Option): an Executive Summary
2. The Technical Proposal
3. The “Administrative Proposal”, consisting of:
  - 3.1 The Management Proposal
  - 3.2 The Financial Proposal
  - 3.3 The Contractual Proposal

# OVERALL STRUCTURE OF THE PROPOSAL (continued)

## ➤ The Cover Letter

The CL is an important part of the proposal and plays a key role at the time of tender opening, when proposals are initially screened for admission. As specified in the General and in the Special Conditions for Tender, the letter should as a minimum include the following general information, reflecting the detailed contents of the proposal:

# OVERALL STRUCTURE OF THE PROPOSAL (continued)

- The **names** of the authors of the proposal and the names and coordinates of the contact persons during tendering as well as of the technical and contractual managers in case of contract award;
- Clear and unambiguous **statements of compliance** with the Agency's technical and management requirements as well as with the applicable contract conditions (i.e. the draft contract) and, if any, special Industrial Policy measures as per the ITT;

# OVERALL STRUCTURE OF THE PROPOSAL (continued)

- The recapitulation of the quoted price and price type, including a breakdown by subcontractor, if applicable;
- A list of subcontractors, if applicable;
- A confirmation of the required validity of the proposal (normally 4 months).

# OVERALL STRUCTURE OF THE PROPOSAL (continued)

## ➤ The Administrative Proposal: Management Part

The Management Proposal consists of the following main parts:

- (Relevant) background and experience of the companies;
- Overall organisation of the company/ies, including the position of the proposed team within the organisation;

# OVERALL STRUCTURE OF THE PROPOSAL (continued)

- Key personnel, their experience, functions and time dedication;
- List of deliverable items;
- Management Plan, policies and procedures;
- Facilities to be used during the execution of the work;

# OVERALL STRUCTURE OF THE PROPOSAL (continued)

- Work Breakdown Structure and Work Package Descriptions (also in the Technical Proposal together with the work logic and activity flow chart);
- Detailed Meeting and Review Plan
- Planning information, including a bar chart covering the execution of the different tasks / Work Packages, the major milestones, meetings and reviews and highlighting items which are on the critical path.

# OVERALL STRUCTURE OF THE PROPOSAL (continued)

## ➤ The Administrative Proposal: Financial Part

The Financial Proposal covers the following aspects:

- Overall pricing information, including price type, total price and price breakdown by phase (if applicable) and by company (if subcontractors are proposed);

# OVERALL STRUCTURE OF THE PROPOSAL (continued)

- The commitment to carry out the required work for the price quoted;

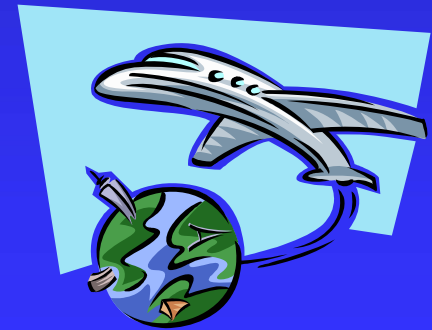
# OVERALL STRUCTURE OF THE PROPOSAL (continued)

- Cost breakdown information using the standard PSS-A forms
  - PSS-A1: Company cost element data sheet
  - PSS-A2: Company Price Breakdown Form (+ exhibit A if applicable)
  - PSS-A8: Manpower and Price Summary at Work Package Level
  - Etc.

# OVERALL STRUCTURE OF THE PROPOSAL (continued)

Such forms must be provided, for each company, for the total of the activity and, if applicable, for each of the phases foreseen by the draft contract;

- Travel and Subsistence Plan.



# OVERALL STRUCTURE OF THE PROPOSAL (continued)

## ➤ The Administrative Proposal: Contract

The Contractual Proposal covers the Bidder's response to the conditions of the draft contract.

Full, explicit and unconditional compliance is expected. However, the Bidder has the possibility to:

# OVERALL STRUCTURE OF THE PROPOSAL (continued)

- o Comment on certain contractual conditions: proposed deviations from the draft contract need to be clearly justified and fully phrased, keeping in mind that such deviations may have a negative effect on the evaluation;
- o Request the application of specific parts of the General Clauses and Conditions (e.g. protection of background information) provided this does not clash with the explicit conditions of the draft contract;

# OVERALL STRUCTURE OF THE PROPOSAL (continued)

- Integrate the parts of the draft contracts which have been left blank in the ITT (e.g. the name of the company's representative authorised to sign the contract, the name of the company's project manager and contracts officer, the name of the companies proposed as sub-contractors;

# OVERALL STRUCTURE OF THE PROPOSAL (continued)

- Propose a payment plan based on (some of) the milestones identified in the management proposal and in accordance with the outline laid out in the draft contract.



# WHAT IS THE LINK BETWEEN THE ITT, THE EVALUATION CRITERIA AND THE PROPOSAL?

ITT	Evaluation Criteria	Proposal
<ul style="list-style-type: none"> <li>■ <b>Statement of Work</b></li> <li>✓ Task Description</li> <li>✓ Technical requirem.</li> <li>✓ Mgmt requirem.</li> <li>■ <b>Special Tender Cond.</b></li> <li>✓ Management</li> <li>✓ Facilities</li> </ul>	<p><b>1) Background and Experience (general and related to the particular field concerned) of the company(ies) and staff (including adequacy of proposed facilities</b></p>	<ul style="list-style-type: none"> <li>■ <b>Management Part</b></li> <li>✓ Company description(s)</li> <li>✓ Key Personnel + CVs</li> <li>✓ Descr. of techn. facilities needed to carry out the work proposed</li> </ul>

# WHAT IS THE LINK BETWEEN THE ITT, THE EVALUATION CRITERIA AND THE PROPOSAL? (continued)

ITT	Evaluation Criteria	Proposal
<ul style="list-style-type: none"> <li>■ <b>Statement of Work</b></li> <li>✓ Introduction</li> <li>✓ Scope and Objectives</li> <li>✓ Task Description</li> <li>✓ Techn. Requirem. / Constraints</li> </ul>	<p>2) <b>Understanding of the requirements and objectives and discussion of problem areas</b></p>	<ul style="list-style-type: none"> <li>■ <b>Technical Part</b></li> <li>✓ Introduction</li> <li>✓ Objectives</li> <li>✓ Trade-offs (if appl.)</li> <li>✓ Refinem. of basic ITT requirem. (if appl.)</li> <li>✓ Discussion on potential problem areas and possible solutions</li> <li>✓ Compl. Matrix vs. techn. requirem. (if appl.)</li> </ul>

# WHAT IS THE LINK BETWEEN THE ITT, THE EVALUATION CRITERIA AND THE PROPOSAL? (continued)

ITT	Evaluation Criteria	Proposal
<ul style="list-style-type: none"> <li>■ <b>Statement of Work</b></li> <li>✓ Objectives</li> <li>✓ Work organisation</li> <li>✓ Task description</li> <li>■ <b>Special Tender Cond.</b></li> <li>✓ Work Breakdown Structure (in magmt.)</li> <li>✓ Work Package Descr. (in magmt.)</li> </ul>	<p><b>3) Quality and suitability of proposed programme of work; adequacy of engineering approach</b></p>	<ul style="list-style-type: none"> <li>■ <b>Technical Part</b></li> <li>✓ Compl. Statement &amp; Matrix (may also be repeated in mgmt.)</li> <li>✓ Study/Dvlpm Logic (chart)</li> <li>✓ Detailed WP description via PSS-A20 form (also in Mgmt.)</li> <li>✓ Technical output</li> <li>✓ “Model Philosophy” (if appl.)</li> <li>✓ PA/QA approach (if appl.)</li> </ul>

# WHAT IS THE LINK BETWEEN THE ITT, THE EVALUATION CRITERIA AND THE PROPOSAL? (continued)

ITT	Evaluation Criteria	Proposal
<ul style="list-style-type: none"> <li>■ <b>Statement of Work</b></li> <li>✓ Objectives</li> <li>✓ Work organisation</li> <li>✓ Task description</li> <li>✓ Mgmt. req. + Stds.</li> <li>✓ Schedule info. and constraints</li> <li>✓ <b>Sp. Tender Cond.</b></li> <li>✓ Management part</li> </ul>	<p><b>4) Adequacy of Management, Costing and Planning for the execution of the work</b></p>	<ul style="list-style-type: none"> <li>■ <b>Management Part</b></li> <li>✓ (Compl. Statement &amp; Matrix)</li> <li>✓ Organisation of company(ies), incl. organisation charts etc.</li> <li>✓ Mgmt. Plan and Procedures</li> <li>✓ Team org., incl. team position within overall organisation(s)</li> <li>✓ Key pers. role and time dedication</li> </ul>

# WHAT IS THE LINK BETWEEN THE ITT, THE EVALUATION CRITERIA AND THE PROPOSAL? (continued)

ITT	Evaluation Criteria	Proposal
(continued)	(continued)	<ul style="list-style-type: none"> <li>■ <b>Management Part</b></li> <li>✓ Planning and Schedule, incl. Planning bar-chart, milestones definition, critical path items (if appl.), etc.</li> <li>✓ Work Breakdown Structure and Work Package Description (also in Tech. Prop.)</li> <li>✓ List of Deliverables</li> <li>✓ Meeting Plan</li> </ul>

# WHAT IS THE LINK BETWEEN THE ITT, THE EVALUATION CRITERIA AND THE PROPOSAL? (continued)

ITT	Evaluation Criteria	Proposal
<ul style="list-style-type: none"> <li>■ <b>Statement of Work</b></li> <li>✓ Objectives</li> <li>✓ Work organisation</li> <li>✓ Task description</li> <li>✓ Mgmt. req. + Stds.</li> <li>✓ Schedule info. and constraints</li> <li>✓ <b>Sp. Tender Cond.</b></li> <li>✓ Financial part</li> </ul>	<p>4) Adequacy of Management, Costing and Planning for the execution of the work</p> <p>(continued)</p>	<ul style="list-style-type: none"> <li>■ <b>Financial Part</b></li> <li>✓ Price summary (per company and/or per phase if applicable)</li> <li>✓ Cost breakdown via PSS-A2, A8 forms (per company and/or per phase if applicable)</li> <li>✓ Milestone Payments Plan (in accordance with Mgmt. Proposal and with draft contract)</li> </ul>

# WHAT IS THE LINK BETWEEN THE ITT, THE EVALUATION CRITERIA AND THE PROPOSAL? (continued)

ITT	Evaluation Criteria	Proposal
<ul style="list-style-type: none"> <li>■ <b>Cover Letter</b></li> <li>✓ E.g.: Special Ind. Policy Measures</li> <li>✓ Other instructions regarding the contents of the proposal</li> <li>■ <b>Special Tender Conditions</b></li> <li>✓ All sections</li> <li>■ <b>Draft Contract</b></li> </ul>	<p><b>5) Compliance with administrative tender conditions and acceptance of contract conditions</b></p>	<ul style="list-style-type: none"> <li>■ <b>Whole proposal (regarding formal response to all applicable tender conditions)</b></li> <li>■ <b>Contractual Proposal</b></li> <li>✓ Compliance statement</li> <li>✓ Comments/Integrations</li> </ul>

# ESA Training Courses for Industry

## Additional information regarding ESA Contracts

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# TYPES OF CONTRACT

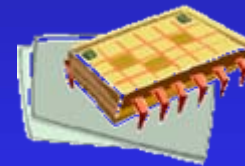
- ESA mainly places contracts of the following types:

# TYPES OF CONTRACT (continued)

o STUDY CONTRACTS



o RESEARCH & DEVELOPMENT CONTRACTS  
for (basic) technology



o MAJOR DEVELOPMENT CONTRACTS (e.g. for  
spacecraft, Space Station, etc.)



# TYPES OF CONTRACT (continued)

- When required (e.g. for complex Flight Level technology and for a full spacecraft development), the Agency applies a **phased procurement and contracting approach**, generally according to the following sequence:

# TYPES OF CONTRACT (continued)

- o Phase A → Feasibility Study
- o Phase B → System Design and Subsystem Specification
- o Phase C/D → Manufacturing, Qualification and Integration
- o Phase E → Operations
- o Etc.

# PRICE TYPES

➤ Depending on the price type used, ESA contracts can be divided into three large categories:

## o FIXED PRICE CONTRACTS

- Firm Fixed Price
- Fixed Price with price variation
- Fixed Unit Price

# PRICE TYPES (continued)

o CONTRACTS WITH CEILING PRICE TO BE CONVERTED INTO FIXED PRICE

o COST REIMBURSEMENT CONTRACTS

- Cost-plus Fixed Fee
- Cost-plus Incentive Fee
- Time and Material

# CONTROL AND EXECUTION OF CONTRACTS



➤ The Agency has developed, and implements, a series of **control and monitoring techniques** (e.g. **progress reporting, progress meetings, reviews, Action Items List, payments, penalties, cancellation clauses**, etc.) in order to ensure that, once the contract is placed (i.e. signed by both parties), it is executed in full compliance with its terms:

# CONTROL AND EXECUTION OF CONTRACTS (continued)

- Technical specifications;
- Price / cost;
- Schedule;
- Deliveries;
- Specific contractual provisions;
- Etc.

# CONTROL AND EXECUTION OF CONTRACTS (continued)

➤ For the purpose of preparing proposals (and, later on, that of correctly managing contracts) it is worthwhile noting that the Agency expects contractors to have similar techniques in place, together with the corresponding organisation and functions (Project Manager, Project Controller, Contracts Officer, etc.), to meet the monitoring requirements both in-house and for the work being entrusted to subcontractors.

# IPR LICENSING SCHEME

# Contractual licensing scheme

## ➤ The old system:

- o introduced an open licensing policy

- o gave the Agency, Participating States and Persons and Bodies under their jurisdiction a free of charge licence to use the IPR developed under an ESA contract for all space applications.

## Contractual licensing scheme (continued)

- The new rules confirm the access and use of IPRs in ESA space programmes or for other scientific purposes free of charge.

## Contractual licensing scheme (continued)

*Unchanged*

o Rule 1: IPRs resulting from an ESA contract used for the Agency's Own Requirements are freely available to the Agency, Participating States and Persons and Bodies.

*New*

o Rule 2: IPRs resulting from an ESA contract, which are used for a national public programme are available under Favourable Conditions to Participating States and Persons and Bodies.

## Contractual licensing scheme (continued)

*New*

### o Rule 3:

- IP resulting from an ESA contract, which will be used for other purposes (i.e. commercially), is available under Market Conditions to any third party, but
- The Contractor may refuse to give a licence, if the access and/or use by the third party is contrary to his Legitimate Commercial Interest.

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# Writing a Good Technical Proposal in Response to an ESA ITT

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## Good Technical Proposal

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⇒ Writing a **good** proposal is like cooking:

- Read the recipe carefully
- Use the best and freshest ingredients you can get
- Be innovative in the details, but keep the structure of the recipe
- Serve hot and fresh from the furnace

⇒ A **good** proposal is very simple, this makes it difficult to write it.

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This Presentation is tailored for the establishment of  
proposals for R&D Contracts

The information given in the following has not taken  
into account specific requirements and constraints  
applicable to flight hardware proposals

## Stepwise Approach - Pre ITT

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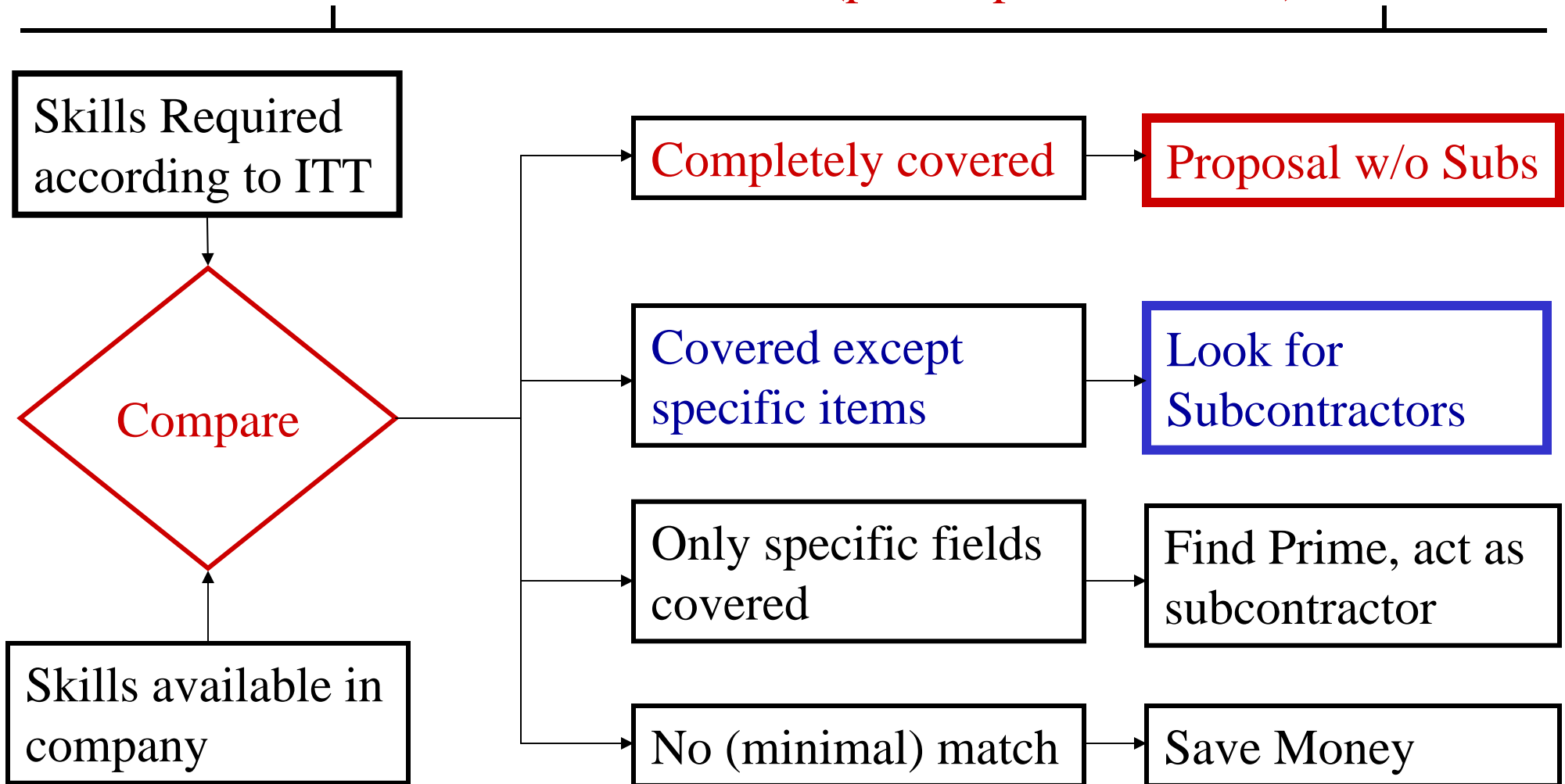
⇒ Keep informed about ESA planning

- Programmatic Papers
- EMITS
- National Delegates
- Personal Contacts

⇒ Prepare for Upcoming activities

- Company internal studies
- Team Formation

### Decision Scheme (pre- or post-ITT issue)



## Basics

### ⇒ Structure of ITT

- Cover letter
- SOW (Statement of Work)
  - Introduction/Background
  - Objectives
  - Task Descriptions
  - Deliverables
- Specification/Requirements
- Special Tender Conditions

### ⇒ Structure of Proposal

- Cover letter
- Technical Part
  - Introduction
  - Technical Discussion
  - Technical Description
- Management Part
  - Workbreakdown Structure
  - Workpackage Descriptions
  - Team/Key Personnel
  - Schedule
  - Deliverables

## Evaluation Criteria (Typical)

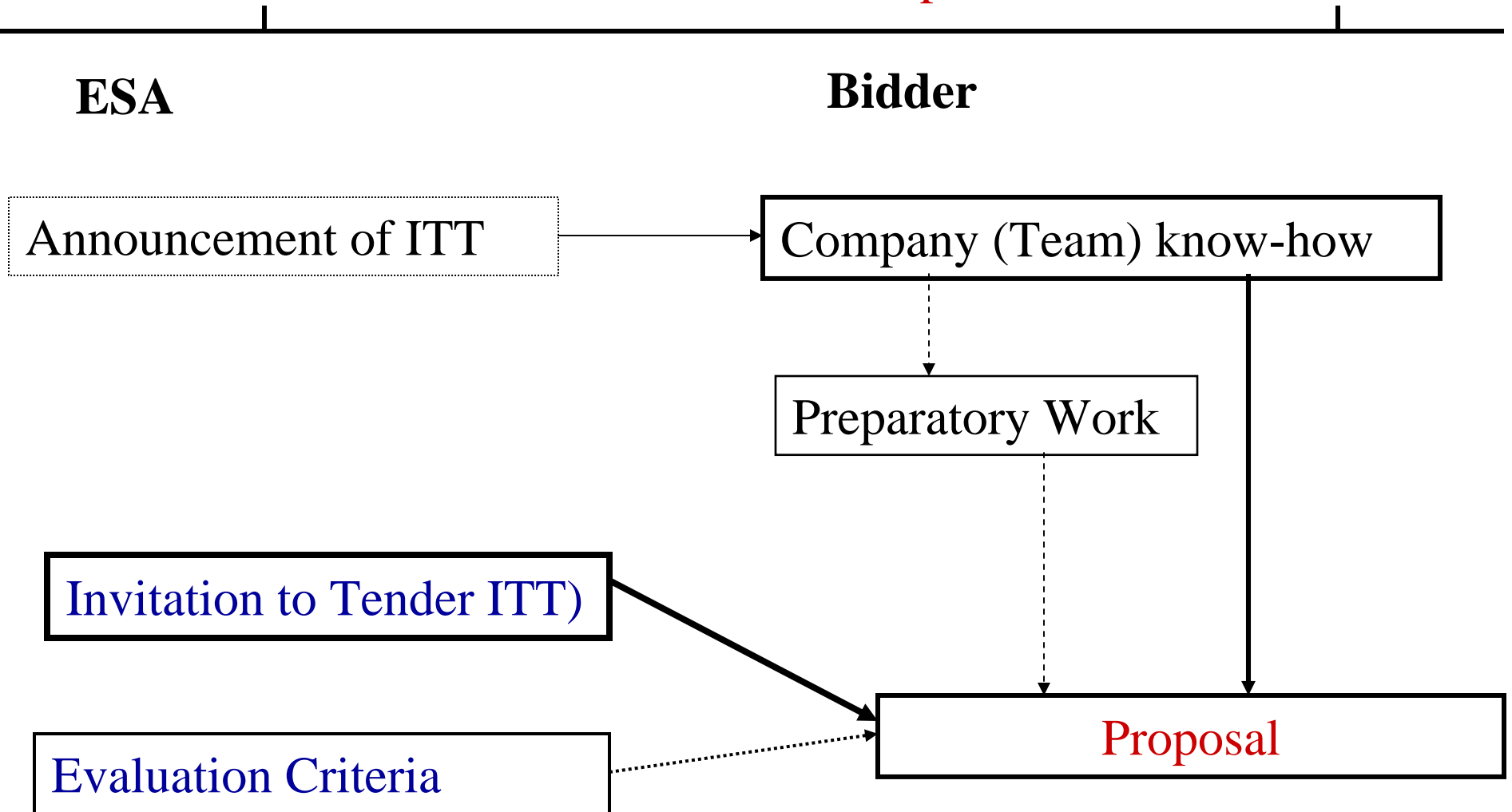
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- (1) Background and Experience (general and related to the particular field concerned) of the company and staff (including adequacy of proposed facilities)
- (2) Understanding of the requirements and objectives and discussion of problem areas
- (3) Quality and suitability of proposed programme of work; adequacy of engineering approach

⇒ **Criteria 1 to 3 represent usually a high percentage of the weight in the evaluation**

- (4) Adequacy of management, costing and planning for the execution of the work
- (5) Compliance with administrative tender conditions and acceptance of contract conditions

## Relationships



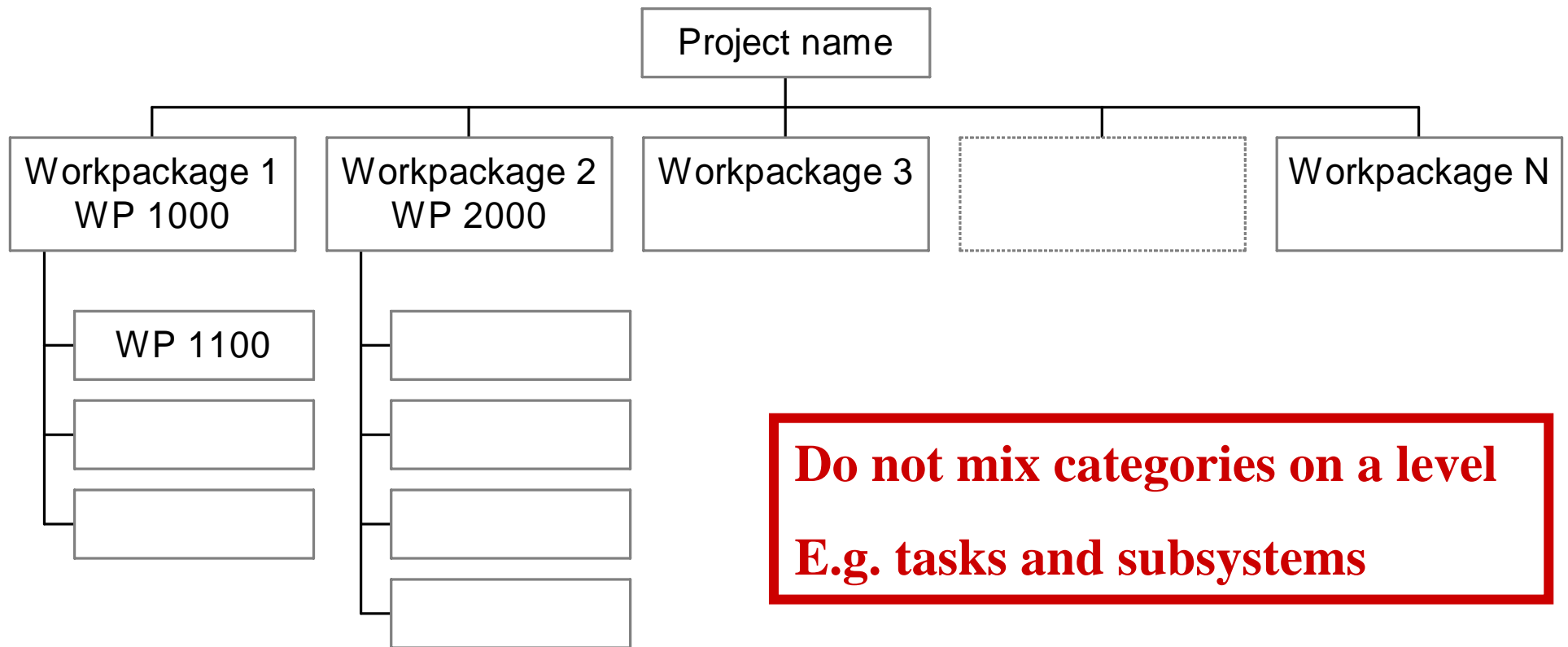
## Stepwise Approach - ITT issued - Step 1

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- ⇒ Read all ITT documents - read them again - mark
- ⇒ Focus on SOW
- ⇒ Understand “Objectives in SOW”
  - Objectives = final development aim
- ⇒ Extract Tasks to be done (Work Package Descriptions-WPD)
- ⇒ Create own Workbreakdown Structure (WBS)
- ⇒ Read SOW again - compare to own WBS
- ⇒ Ask somebody else to check you first step

# Workbreakdownstructure

WBS



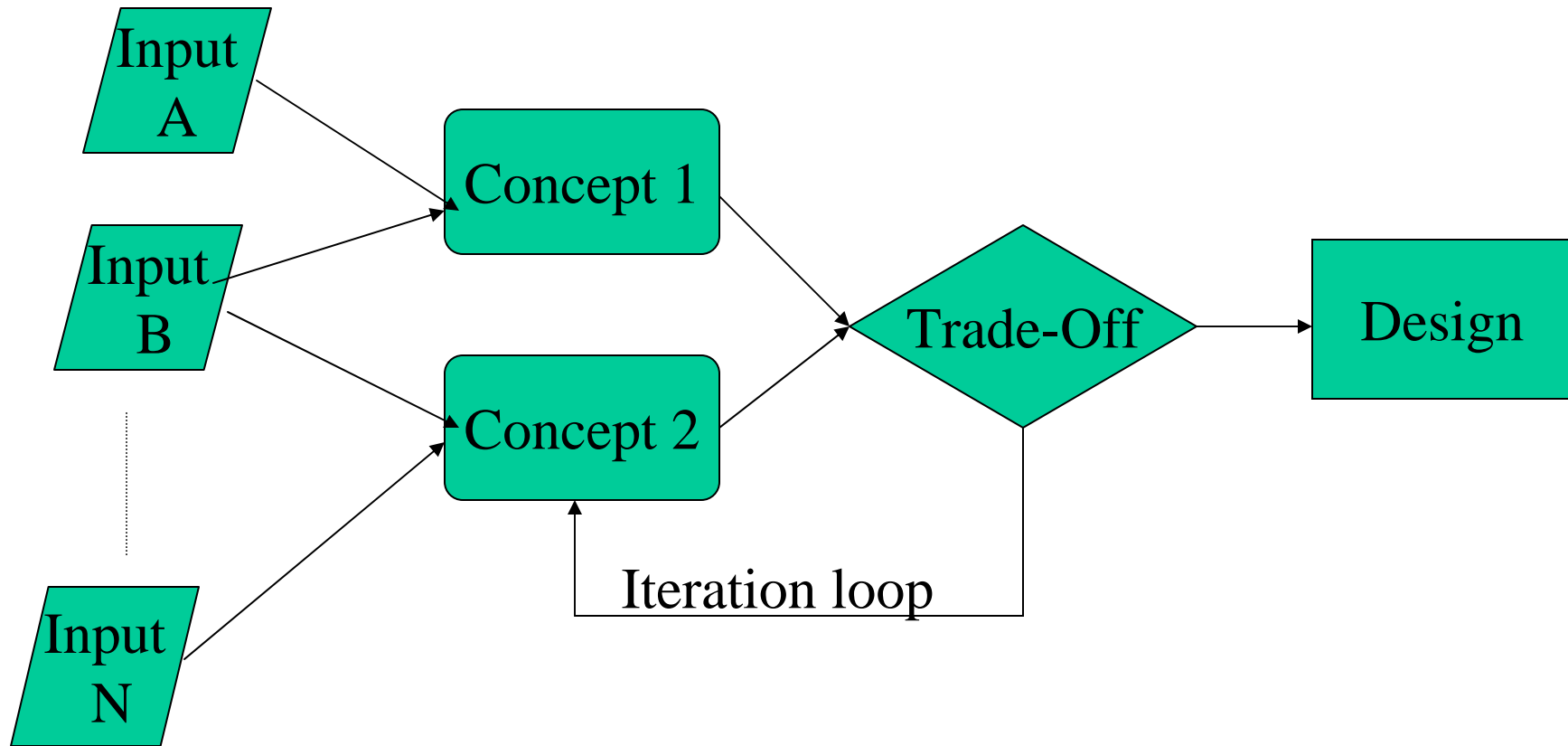
## Stepwise Approach - ITT issued - Step 2

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⇒ Concentrate on specification/requirements

- check completeness/consistency with WBS
- check availability of required skills in company/team
- define clear tasks for subcontractors
- generate structure (list of contents) of proposal and study logic for activity, establish schedule for proposal
- built up internal/external proposal/study team (M-T-C)
- discuss requirements
- develop solutions in teamwork (brainstorming)

## Flowchart (Example)

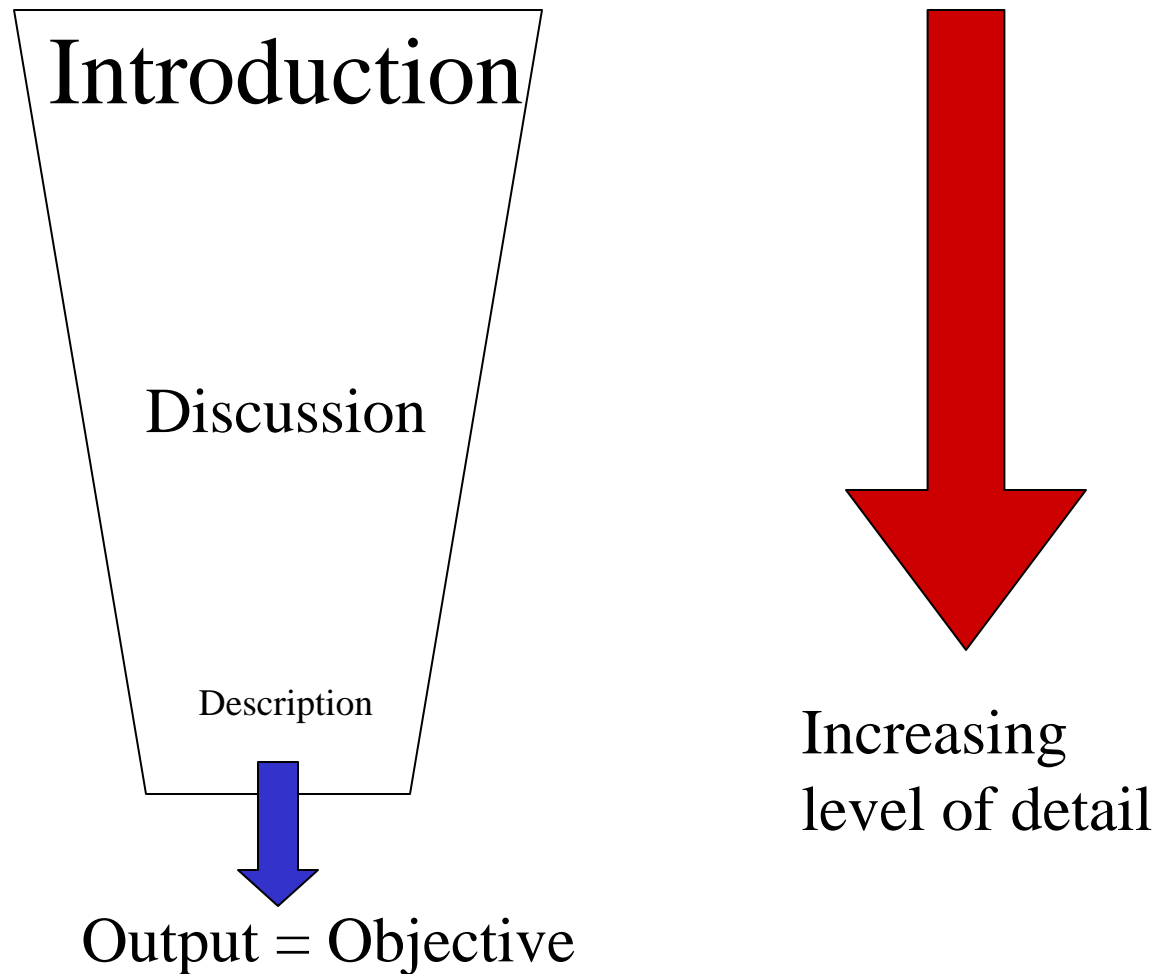


## Stepwise Approach - ITT issued - Step 3

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- ⇒ Read SOW and Requirements - Consistency Check against work done up to now
- ⇒ Check WBS, Study Logic and List of Contents
- ⇒ Start writing the proposal
  - define overall layout of proposal
  - assign chapters very clearly to responsible person
  - define delivery dates for inputs
  - keep discussion in study team alive

## Writing a Proposal - the Funnel Principle



## Writing the Proposal

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### ⇒ Introduction

- considerations showing broad understanding of the topic, like
  - technical environment
  - programmatic view
  - scientific background and outlook
  - related activities

## Writing the proposal

---

### ⇒ Technical discussion

- proposed study logic
- critical review of requirements
- additional requirements (missing in ITT)
- general technical discussion
- existing solutions and conceptual ideas
  - use illustrations, tables, graphs, schemes
- Trade-off between competing concepts
  - never use cost as trade-off criterion
- rationale for preferred concept

## Writing the proposal

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### ⇒ Technical Description

- detail proposed/preferred concept
- make very clear, what you are proposing/expecting to develop (sketches, simple drawings)
- set a highlight by higher level of detail in design of a critical item/subsystem (bonus points)
- offer elegant solutions exceeding the planned budget as option (as addition to a compliant baseline)
- demonstrate the compliance with the SOW/Spec
  - clearly explain incompliances (be honest)
- give a first iteration of the planned testing

## Writing the Proposal

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### ⇒ General Hints

- a good technical part of a proposal
  - is consistent and balanced in all chapters
  - is well structured and shows a logical development
  - is easy to read and complete
  - defines very clearly what ESA gets out of the activity
  - is consistent with WBS and Workpackage descriptions
  - reflects the technical knowledge of the proposed team and key personnel
  - is catching the eye

## Writing Proposal - Optional Additions

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### ⇒ Executive Summary

- Summary of the of the content of the proposal in a few pages

### ⇒ Summaries

- Short summaries at the beginning of each chapter

## Writing a proposal

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⇒ Avoid

- Pure repetition of the SOW
- Lengthy philosophical considerations
- Inconsistent subcontractor contributions
- Permanent complaints about budget limitations
- Narrow single solution approach
- Inconsistency between compliance matrix and technical description

## Writing a proposal- Completion of technical part

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⇒ Read ITT again and check for compliance:

- are the objectives clearly reflected ?
- is the technical discussion complete and consistent ?
- is there a clear proposed baseline in the technical description ?
- are the workpackages in line with technical part?

⇒ Check readability and understanding with persons not involved in proposal activity

⇒ Apply evaluation criteria (1 to 3)

- make you own judgement