

Technical Communication



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Technical Communication

- **Types of technical communications**
 - **Technical writing**
 - Technical report, Thesis
 - Journal paper, Conference paper, Case Study, Survey paper
 - Research proposal
 - Sections: Executive summary, Abstract, Conclusions, Etc
 - **Technical presentation**
 - Powerpoint presentations, Poster presentation
 - Demonstrations: Experimental, movies, website, etc
- **Planning technical communication tasks**
 - **Outline: Start, middle (sections), ending**
 - **Structure: Format, organisation, templates, etc**
- **Exercises**
 - **Preparing Resume and CV**
 - **Writing a research proposal**
 - **Write a IEEE Transactions Paper**

Why do we need Technical communication skills?

- You need to be a **technical communicator** as engineering is a people-oriented profession
- Engineers **not only develop technologies but help people make use of technology**
- Engineers must communicate with regulators, funding agencies, suppliers, clients, customers, the media, etc, and sometimes the general public
- You must communicate your subject-matter so that **information can be understood and used** by a variety of people
- Engineers **generate raw data and turn this into information** to help people solve problems

Necessary skills for engineers

- **Manage information**
- **Write technical information for many audiences – often with conflicting needs**
- **Design graphics for technical information**
- **Elicit expert information – interview others**
- **Present information verbally**
- **Work collaboratively – write collaboratively!**

Understand human psychology to be able to

- **Sell yourself**
 - Professionally: CV, www (professional networking)
 - Personally: "Style + core values", www (social networking)
- **Secure resources for yourself**
 - Sell ideas, see opportunities, think "out of the box"
- **Communicate technical "stuff"**
 - Verbal
 - Written (Reports, thesis, papers, summaries, etc)
 - Presentations (preparation and delivery)

Who is Gurvinder Singh Virk?



• Education

- Trained in electronics with specialism in control engineering (theory and applications)
- BSc 1st Class in EE Eng, University Manchester, UK
- PhD in Control theory, Imperial College, London, UK

• Employment/ work experience (highlights)

- Technical Director, InnotecUK, UK
- Was Professor of Robotics, Univ of Gävle & KTH, Sweden
- Was DAAD Prof, South Westphalia Univ App Sci, Soest, DE
- Was Prof of Robotics, HEAD SEAT-WGN, Massey Univ, NZ
- Was Professor of Robotics & Control, Univ of Leeds, UK
- Was Professor of Control Eng, Univ Portsmouth, UK

• Contact details: gurvinder.virk@innotecUK.com

• Research: Application of theory to real problems

- Climbing and walking robots (CLAWAR)
- Smelling and intelligent robots
 - Biologically inspired robots
 - Intelligent sensing and control
- Medical technologies: Engineering assisted surgery
 - Assistive devices (personal and medical)
 - Clinical cases
- Control systems theory and applications
- Standards and ethical issues for new robots

• Commercialisation of research

- Development of new robot products
- CLAWAR Association Ltd, UK, registered charity – robot standardization and networking, annual CLAWAR conference for advancing robotics for public benefit

• Extensive experience academe & business

- Research projects and commercialisation
- Teaching (UG, Masters, PhD)
- Administration and course development
- People skills and staff management
- Finance and project management
- Considerable networking skills

• Outputs

- >350 publications including 14 books and 4 patents
- €20M research funding from UK, industry and the EU in >50 research projects
- 16 successful PhDs
- Currently involved in 14 R&D projects with InnotecUK

• >30 years R&D experience and major national and international collaborations

• Scholarly activities

- FIET, CEng, FIMA, CMath, FCIBSE, MIEEE
- ISO TC299 WG2 Chairman: Personal care robot safety
- IEC/ISO JWG5 Chairman: Medical robot safety
- ISO TC299 WG6 Chairman: Modularity for service robots
- Editorial Boards of several journals: Industrial Robot, Robotics and autonomous systems, J Robotics and mech eng, J Advances in acoustics and vibrations, etc
- Invited expert by many countries and organisations: China, India, Russia, USA, EC, UK, Sweden, NZ, Finland, Belgium, Denmark, France, Germany, Italy, Taiwan, Korea, many universities in UK and Europe, Plenary presentations at international conferences, etc
- >150 invited seminars

• Co-ordinator of EC Network for climbing and walking robotics for 10 years (CLAWAR; www.clawar.org)

• Awarded Freedom of the City of London for contributions to IT

Exercise 1: Produce a 1 slide summary of yourself

- **Resume**

- Short overview of you
- All inclusive summary of skills, experiences and qualifications
- Interest and ambitions
- Key data (publications, important achievements, honours, etc)

- **Needs to be**

- Clear and well-organised
- Relevant and necessary
- Consistent and not mixing fonts and styles
- Current

- **Contact Information**

- **Curriculum vitae**

- As long as needed to present detailed information about you
- Detailed listing of education and academic background with dates
- Detailed account of skills and experiences
- Details of key data as in Resume
- Interests

- **Needs to be as for Resume plus**

- Logical
- Concise: relevant and necessary
- Complete

- **Contact Information**

20 minutes to prepare, and then verbal presentations individually to class; summaries submitted via email to GSV for presentation to class in 2 weeks and possible re-visiting in private consultations.

Introduction to technical writing

- **What is technical writing?**
 - **A brief and to-the-point document which describes a body of technical work**
 - **Factual presentation of technical information which can have many forms:**
 - **Provide new technical knowledge: research paper, PhD thesis, new product, etc**
 - **Compare or use existing technical results: survey paper, Masters/ Bachelors theses, etc**
 - **Discuss some particular perspective of technology: role of some technology in aspects of society, etc**
 - **Summary: précis of full technical document (generally into non-technical terms), etc**

Writing Style - simple rules

- **Use simple sentences, unless you are comfortable writing complex and compound sentences**
- **Avoid repetition but some reinforcement is OK**
- **Make use of the grammar and spelling checker, but exercise caution**
- **Will a Figure or Table be able to say the same thing more effectively?**

Technical writing: Dos and Don'ts

- **Write for your readers, not for yourself**
 - Write for the uninformed reader
 - Do not write for someone who already knows what you know
- **Write as if for someone one educational level below yours (bright junior below you)**
- **Or in a related field (bright senior in physics?)**
- **Do not assume anything is obvious**
- **Data does not stand by itself; it must be interpreted**

Technical writing: Dos and Don'ts (2)

- Do not use direct quotes from published material. Read the information and put it into your own words
- Don't use colloquial speech, slang
- Don't use contractions, "isn't" must be "is not", etc
- Use past tense, work has been done and is being now reported
- First vs third person: use mainly third person, eg " the study was undertaken" rather than "I (or we) undertook this study"
- Try to use active verbs as much as possible; writing that overly uses passive verbs (is, was, has, have, had) is deadly to read and almost always results in more words than necessary to say the same thing.:
 - ACTIVE: "the **mouse consumed** oxygen at a higher rate..."
 - PASSIVE: "oxygen **was consumed by the mouse** at a higher rate.."

Linking Research with Technical Writing

Experimental process

1. What did I do in a nutshell?
2. What is the problem?
3. How did I solve the problem?
4. What did I find out?
5. What does it mean?
6. What are the implications?
7. Who helped me out?
8. Whose work did I refer to?
9. Extra Information

Section of a Paper

1. Abstract
2. Introduction
3. Theory & Methods
4. Results
5. Discussion
6. Conclusions
7. Acknowledgments
8. References
9. Appendices

Planning technical writing task

- **Outline**
 - **First bit**
 - Title, Authors and Affiliations, contact details
 - Abstract, Executive summary, Preface, Key words
 - Introduction, Background, statement of problem, etc
 - **Middle bit**
 - Main methods, results and discussions organised in suitable sections/chapters
 - **Ending**
 - Conclusions acknowledgements and references
- **Format may need to comply to given template and prescribed limits (eg. number of pages)**
- **We will focus on writing technical papers/posters/research proposals**

First bit

- **Title**

- **Catchy informative short title which describe accurately what is being presented. Used for indexing and in searching for keywords**
- **Useful to begin title with key word (not Theory, Study, Investigation)**
 - **Single-transverse-mode double-pulsed Q-switched ruby laser for high depth-of-field holography: theory and experiment**
- **But keep it short:**
 - **High-coherence ruby laser for double-pulse holography**

- **Authors and affiliations**

- **Abstract**

- **Summary of the work presented and entices the reader to read on**
 - **Must bring out novelty of work not go into deep background or introduction**
- **Brief and informative without reference to paper (≈ 300 words for paper)**

- **Key words**

- **Key terms related to the area of work normally fitting some data base**

Abstract

- **An abstract is a very concise statement of the major elements of your research project. It states the purpose, methods, and findings of your research project.**
- **An abstract is a condensed version of full paper**
- **Four C's of abstract writing**
 - **Complete; it covers the major parts of the project/case**
 - **Concise: it contains no excess wordiness or unnecessary information**
 - **Clear: it is readable, well organized, and not too jargon-laden**
 - **Cohesive: it flows smoothly between the parts.**

Why abstracts are not accepted

- Abstracts are submitted for conferences when authors wish to present their work. These are evaluated by experts and accepted (or not). The most common deficiencies encountered (in order of frequency):
 1. Poor presentation
 2. Weak discussion
 3. Lack of originality
 4. Poor methods
 5. Inappropriate statistical analysis
 6. Inadequate results

Middle bit

- **Introduction**
 - An informative overview of the problem, why it is important and worth solving, what others have done and they did not succeed, what is known before study and after
 - Direct it at uninformed readers
 - Should include both summary of results and conclusions
- **Theory, Procedures, etc**
 - Details of experiments, protocols, data collected
- **Results**
 - Presented in best form for display (table, figure, graph, histogram, etc) with statistical analysis (means, SDs, etc)
- **Discussion, etc**
 - interpret of results in light of what was already known, and to explain new understanding after taking new results into consideration

Ending

- **Do not regurgitate paper**
 - Especially not a very short paper
- **Highlight results or draw conclusions here**
 - Give advantages but be frank about limitations as well
 - Point out directions for further work
- **State conclusions firmly**
 - We have used laser scanners coupled with stereo vision cameras to design an effective autonomous navigational strategy for mobile robots to operate in a variety of structured and unstructured environments
- **Remember to keep it short.... So write...**
 - Laser scanners and stereo vision are used to navigate a autonomous mobile robot
- **Annex: specialist details**
- **References: in the required style**
- **Acknowledgements**

References

- Each reference includes: reference number, author's name, article title, journal title, year of publication, volume number, issue number and page number
- You must provide complete citations for each reference cited in your paper
- The format for entries in the Reference section differs for books and for journal papers because different kinds of information must be provided
- Different formats for referencing
 - Harvard format (the name and year system) is the most widely used
 - Alphabet-Number system is a modification of name and year system
 - Citation order system

Referencing (2)

- **In name and year system:**
 - Citation in the text is followed by the author's last name and year of publication between parentheses.
 - If they were two authors then both last names are written.
 - If more than two then the only first author's name is written followed by the abbreviation et al
 - If a single statement requires more than one citation then the references are arranged chronologically from oldest to more recent, separated by semicolons.
 - If more than one reference share the same year then they are arranged alphabetically within the year.
- **In alphabet-number system:**
 - Citation by number from an alphabetically arranged numbered reference list.
- **In Citation order system:**
 - The references are numbered in the order they are mentioned in the text

Preparing Technical Posters

- Posters can be used to share results with your peers, in a collegial and nonthreatening atmosphere. Feedback received during a poster session can be invaluable in refining your research and preparing for publication in a peer reviewed journal
- Posters must clearly and effectively communicate your results to your peers in a format that stimulates interaction and discussion



Guidelines for Posters

- Any suitable poster medium/material can be used: paper (chart sheets), vinyl sheets, stiff cloth, hard plastic sheets etc.
- Poster area normally do NOT normally EXCEED 1 m², but your e-poster will be one powerpoint slide (landscape) printed into A1 format
- Poster should have PRINTED DATA ONLY (including graphs, pictures, diagrams, etc.).
- If you are planning to make a full-size digital poster, you can use Word, Powerpoint or software like Adobe PHOTOSHOP.
- Paper print-outs can be stuck on a base made of any of these materials, in case printing whole poster is difficult.
- No form of artwork is acceptable: glitter, sparkle, paints etc. should be strictly avoided. Remember that you are aiming to present at a TECHNICAL poster session, not an art exhibition!
- However, markers may be used, but sparingly
- For preparing e-Posters, simply submit your e-file of your Poster

Format of Posters

- **Components of a Research Poster**
 - **Banner:** Title, authors, affiliations, logos (should be readable from 7-8m)
 - **Abstract:** accurate summary (font size 16-18pt)
 - **Introduction:** must introduce topic and say why was this work done
 - **Methods:** explain what is done and enough information to allow others to judge that that the study was adequate to answer your research questions (in journals there should be enough information to allow others to replicate your study to get your results)
 - **Results:** what has been found from the study
 - **Discussion:** should say what you think the results mean and present supporting and contradictory findings plus limitations of your study
 - **Conclusions:** of your results and consequences
 - **Tables and Figures:** clarify and support display of your results
- **Technical Details:** font size should be chosen to allow reading from 1m or more

Poster background and readability

- **Poster background and prints should be in contrasting colours**

A light background & dark print works well.

A dark background & light print works well.

A dark background & dark print??? Not work so much..

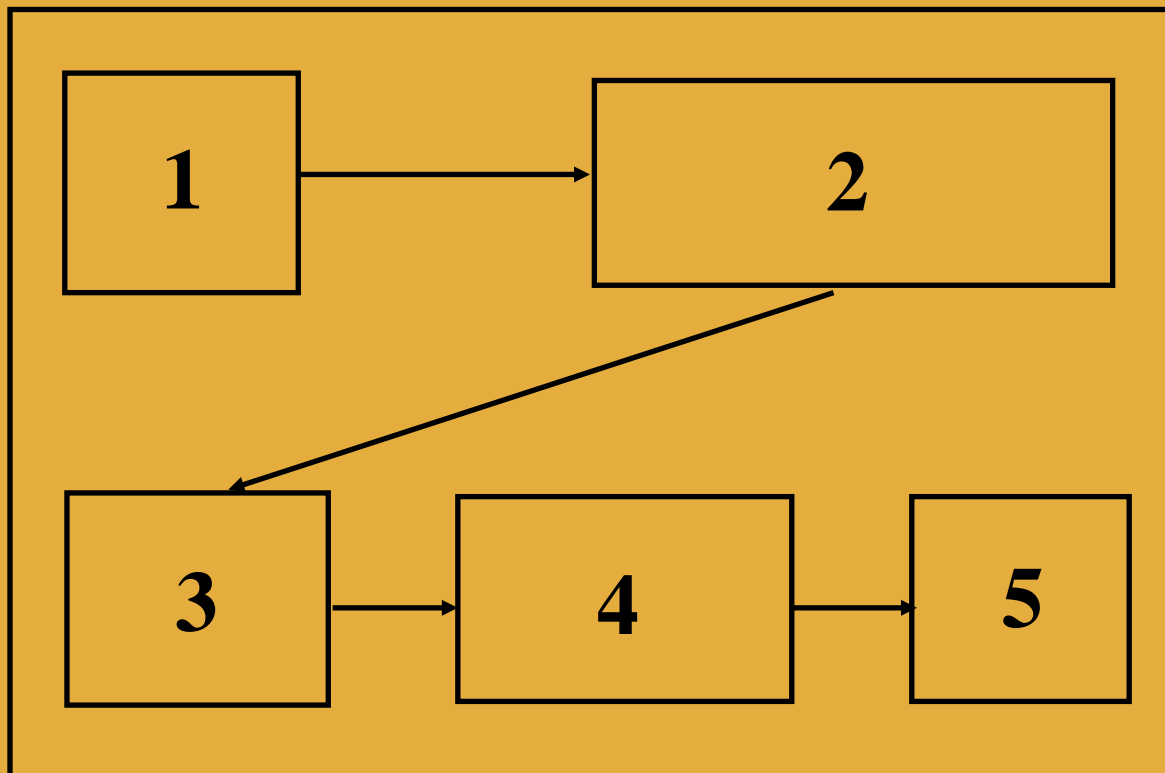
A light background & light print??? Not at all..

Remember fonts as well!!!

Remember fonts as well!!!

Poster layout (wrt to Eye movement)

- Design the layout of the poster should be such that movement of the eye should be natural; for example...



Graphs and Figures

- **A well-documented graph or figure is way more attractive and better than lengthy text.**
- **Tables are difficult to read; represent data graphically whenever possible.**
- **A photograph often is worth a thousand words.**

Technical Presentations Overview

- **Planning technical presentations**
 - Define purpose
 - Outline: Start, middle, ending
- **Preparing technical presentations**
 - Visual aids
 - Slides and illustrations to best communicate the "story"
 - Notes: What to say and when
- **Delivering technical presentations**
 - Interaction with audience
 - Time management

Key aspects of giving a talk

- **Remember you are giving a "performance"**
 - Your information is the story
 - Your delivery and visuals are the entertainment
- **Be aware of your audience's capacity to remember.... People retain about 28% of information... so you have to repeat key things!**
- **As you plan your talk be aware of how quickly time goes by and that you have time for only 3-5 points which you can make**
- **Simple and best process to follow in making a presentation:**
 1. Tell them what you are going to tell them
 2. Tell them
 3. Tell them what you have told them

Planning technical presentations

- **Identify the purpose**
 - What is your general purpose?
 - What is your specific purpose?
 - What is your "thesis statement"?
 - What do you want your audience to learn?
 - What action should be taken next?
- **Perform an analysis of your audience**
 - Identify your audience (experts, technical, non-technical, lay public, mixed)
 - Identify your objectives for the audience
 - Identify their understanding of the subject
 - Determine how willing they will be to accept your ideas
- **Determine facilities available**
 - Audio-visual equipment, whiteboard, OHP, etc
 - Layout of room for optimising delivery

Organisation of presentations

- **Outline of content: Title slide (Introduction), overview, "middle bit", ending**
 - **Percentage of time**
 - Introduction ($\approx 20-25\%$)
 - Main body ($\approx 60-70\%$),
 - Conclusions ($\approx 10-15\%$),
- **Introduction: Things to do**
 - **Identify who you are and establish your "presence"**
 - **Why should they listen to YOU? Express your qualifications, passions, become a bit "human" to the audience**
 - **Earn the audience's attention**
 - **What will they get from listening to you?**
 - **Why should they listen?**
- **Introduction: Things not to do**
 - **Don't say "Before I begin" and don't apologise for being nervous**
 - **Don't read the introduction**
 - **Don't use a dramatic, irrelevant opener**
 - **Don't make the introduction too long**

Organisation of presentations (2)

- **Outline of content:** Title slide, **overview**, **"middle bit"**, ending
- **Overview:** Give a roadmap of your presentation
 - Explain where you plan to go, set up the story
 - Explain what the audience can anticipate
 - Explain if they can interrupt you during your presentation or if they should wait till the end to ask questions
- **Middle (main) body**
 - Create main points to express key ideas and major claims
 - Present points as declarative statements in most appropriate format
 - Reflect points back to thesis
 - Keep speech points unified, coherent, and balanced
 - Verbalize connections between points
 - Make clear when transitions are being made between one point and another.... ex: now that I have explained the user requirements, I will discuss how these are met in the design carried out....

Organisation of presentations (3)

- **Outline of content: Title slide (Introduction), overview, "middle bit", ending**
- **Conclusions/ Conclusion**
 - **Purpose: Tell them what you have told them!**
 - Offers audience a sense of closure
 - Reinforces thesis
 - **Tips**
 - Restate the thesis using a strong concluding statement
 - Make conclusions strong and brief
 - **Don't**
 - Don't drag out the conclusion
 - Don't end on a weak or rambling note
 - Don't introduce new points

Preparing technical presentations

- **Visual aids (discussed in next slides)**
- **Slides and animations to best communicate the information**
 - Use figures, graphs, photos, movies, etc to present your information in the "best" way possible
 - Use animations and timing tools to keep track of what you should talk about and when
- **Notes: What to say and when**
 - Make key notes to remind you of the points you should not forget. But do not read parrot fashion entire paragraphs

Visual aids: Fonts

- Use readable fonts, bold, italic, etc
- Use readable font sizes
- Use appropriate colour combinations

Arial

40 point Title

30 point Heading

24 point sub-headings

18 point references and Labels

Avoid using 12 point or smaller

40 point Title

30 point Heading

24 point sub-headings

18 point references and Labels

Avoid using 12 point or smaller

Times New Roman

Script MS Bold

40 point Title

30 point Heading

24 point sub-headings

18 point references and Labels

Avoid using 12 point or smaller

Visual Aids (2): Grammar and slide layout

- **Bullet point 1: Make sure**
 - Sub-bullet point 1: Grammar, she is correct
 - Sub-bullet point 2: There are no tYPos
- **Bullet point 1: Slides look appealing and not too cluttered**

Title



Fonts and font colours match with background for easy reading

Bullet Points line up



Informative – but not too much detail

Visual aids (3): Capital letters, number of words, figures

- **The abuse of capital letters**
 - Bullet points typically have one capital letter at the beginning
 - Just because You think a word is Important does Not mean it should be Capitalized (although this can help it stand out **SOMETIMES**)
 - **ALL CAPITAL LETTERS MAKE IT HARDER FOR YOUR AUDIENCE TO DECIPHER WORDS**
- **Avoid using too many words**
 - Use Bullet Points
 - Use Condensed Sentences
 - No parking structure will be considered if the cost per stall to erect the structure is greater than \$11,000.
 - Parking structures will cost less than \$11,000
- **Present the information in the best possible way**
 - Remember "1 picture can replace a thousand words"

Visual aids (4): Do's and Don'ts

Do's

- Design them large enough
- Design them to be simple
- Design them to be clear
- Label them fully
- Use only what you need

Don'ts

- Use too much text
- Use excessive artwork
- Make things look cramped
- Use too many colours
- Overuse capitals

Visual aids (5): Referencing sources

- **Reference...**

Quotes

Figures

Facts

Statistics

Codes

Charts

Graphs

Pictures

Results

etc...

Delivery: A good delivery

- **Is clearly audible, fresh, and energetic sounding**
- **Is a polished version of yourself**
- **Looks and sounds natural**
 - Think how you use your voice, gestures and movement to stress important points
- **Is human, not robotic or like a TV news anchor**
- **Has controlled and planned body movements**
 - Avoid fidgeting, distracting movements but DO move around a little in a natural manner
- **Is always focused on the goal (speak so your audience will understand)**
- **Maintain gentle eye contact**
 - Sweep the room with your eyes. Notice responsive faces and return to them!

Delivery (2): Requires practicing

- **Practice is the most important aspect of a presentation**
- **It is in practice that you find out if you**
 - **Make sense and sound knowledgeable**
 - **Or sound like an idiot!**
- **The best way to practice**
 - **Highlight in your notes difficult pronunciations or phrases that need emphasis or a slower rate of speaking**
 - **Practice in a room similar to where you will present and ask a friend to listen and give feedback (and keep time for you)**
 - **Always practice out loud and plan movement and gestures**
 - **Practice with all of the equipment you will use**
- **Practice 7-10 times**
 - **1st: Use notes and try to get a sense of the rhythm of the speech**
 - **2nd to 4th: Make notes of difficult transitions, phrases, or words**
 - **5th to 7th: Focus on how to maintain freshness and energy without making the speech seemed “canned”**
 - **Practice 2-3 more times to make sure!!**

Delivery (3): Establishing credibility

- **KNOW that you KNOW your stuff**
- **KNOW that you ARE an expert**
- **Speak loud enough**
- **Look at your audience**
- **Don't assume your audience knows**
- **Be in control at all times**
- **Watch for audience's non-verbal feedback and adjust your rate, content, or eye contact for them**

Presentation Day!!

- **Presentation checklist**
 - Check the room
 - Bring your presentation on a reliable USB
 - Check the presentation projection system
 - Decide how loud you must speak
 - If possible, decide where you and your audience will be located
- **Dealing with the nerves!**
 - Practice dramatically reduces nervousness
 - Nervousness is natural; the key is to use the nervous energy to speak loudly and energetically
 - Try breathing exercises

Try individual practice presentations

- **40 minutes to prepare a 5 minute presentation on your favourite hobby using the guidance provided in class**
- **If time allows we will make presentations to be reviewed by class using check list and feedback passed back individually**
- **Please remind me!!**

Check list for Reviewing talks

- **Is the structure of the talk evident?**
- **Does the speaker sound enthusiastic?**
- **Are the visuals clear and compelling?**
- **Does the speaker maintain eye contact?**
- **Is the subject matter clear and compelling?**
- **Does the speaker move naturally, without fidgeting?**
- **Does the pace seem right?**
- **Can you hear every word?**
- **Do the speaker and the talk hold your interest?**

Writing Research Proposals

- **Blue skies or targeted research?**
 - Pay attention to be proposals are in any specific area or some sector is being encouraged
- **Follow the prescribed rules and format (see examples at AAL Call4, EC ICT Call8)**
 - Admin part (Part A)
 - Case for support (Part B)
- **Will focus on ICT Call 8 STREP (Small and medium-scale focused research project) proposals; further details can be found at**

<http://ec.europa.eu/research/participants/portal/page/cooperation?callIdentifier=FP7-ICT-2011-8>

ICT Call 8: Part A

- **Form A1: Summary**
 - Title, Acronym, duration, Keywords, Abstract
- **Form A2: Participants**
 - Legal name, number, short name, address, (company, university, SME), etc, contact details
- **Form A3: Budget**
 - Cost model, indirect costs, Type of activity (RTD, Demonstration, Management), Personnel costs, sub-contracting, other direct costs, Total budget, Requested EU contribution

ICT Call 8: Part B – Case for Support

- Title page and Table of contents
- Section 1: Scientific and/or technical quality, relevant to the topics addressed by the call
 - 1.1 Concept and objectives
 - 1.2 Progress beyond the state-of-the-art
 - 1.3 S/T methodology and associated work plan
- Section 2. Implementation
 - 2.1 Management structure and procedures
 - 2.2 Individual participants
 - 2.3 Consortium as a whole
 - 2.4 Resources to be committed
- Section 3. Impact
 - 3.1 Expected impacts listed in the work programme
 - 3.2 Dissemination and/or exploitation of project results, and management of intellectual property
- Section 4. Ethical Issues



**Prepare 1 A4
page proposal
for this call**

ICT Call 8: Evaluation criteria

1. Science and/or Technological Quality (threshold 3/5)

- Soundness of concept, and quality of objectives
- Progress beyond the state-of-the-art
- Quality and effectiveness of the S/T methodology and associated work plan

2. Implementation (threshold 3/5)

- Appropriateness of the management structure and procedures
- Quality and relevant experience of the individual participants
- Quality of the consortium as a whole (including complementarity, balance)
- Appropriateness of the allocation and justification of the resources to be committed (staff, equipment...)

3. Impact (threshold 3/5)

- Contribution, at the European and/or international level, to the expected impacts listed in the work programme under relevant topic/activity
- Appropriateness of measures for the dissemination and/or exploitation of project results, and management of intellectual property.

4. Total threshold 10/15

Scoring criteria for AAL Call 4 proposals

- **5 (Excellent)**
 - Issues under assessment are comprehensively covered.
- **4 (Good)**
 - Issues under assessment are well covered, with minor suggestions being put forward to enhance the project chances of success.
- **3 (Acceptable)**
 - Issues under assessment are adequately covered, but the proposal shows weakness in some specific area of the criterion. To enhance the project chances of success may require significant additions or changes to some specific part of the proposal that can realistically be introduced prior to the start of the project.
- **2 (Defective)**
 - Issues under assessment are sketchily covered and proper evidence of project chances for success is lacking or omitted. Potential for greater chance of successful outcome(s) requires significant major additions or changes.
- **1 (Failed)**
 - The proposal does not adequately cover the issues under assessment and/or demonstrate that it has met the objectives of the AAL Joint Programme.

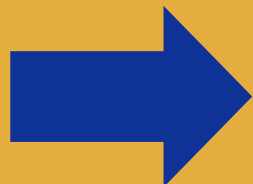
Exercise 2: Research proposal

- Use following "Call for proposals (AAL Call 4)":
 - The call aims at development of information and communication technology-based solutions which will help older persons to sustain their optimal level of mobility for as long as possible, as well as enhance their individual sense of confidence, autonomy, competence, security and safety. This is known as Active Assisted Living (AAL)
 - This AAL Call 4 addresses issues that inherently enable older people's mobility in terms of moving in the home and/or outside the home.
 - The following topical areas are in the scope of the Call:
 1. Orientation and navigation
 2. Assistive Technology

For more information, see www.aal-europe.eu/calls/call-4-2011

Proposal for AAL Call 4

- Assume you are working for an engineering company involved in the AAL area which wishes to submit a proposal to this Call
- Write a 1 A4 page proposal to do this
- Proposal should comprise following sections
 1. Aim, duration, partners, funding needed
 2. Scientific and Technological excellence
 3. Workplan
 4. Quality of the partners
 5. Potential impact



1 page proposals submitted via email to GSV for presentation to class on 29/30 December and evaluation and prioritisation.

Evaluation criteria for AAL Call 4 proposals

- 1. Relevance and innovation (threshold 3, weight 1):** assesses whether the proposed project is in line with the objectives of the Call and demonstrates an innovative approach to the theme
- 2. Scientific and technical quality (threshold 3, weight 1):** assesses the overall quality of the project proposal and the extent to which the proposed project objectives and the consortium will be able to contribute to scientific and technical advancement in the field and to deliver the planned final deliverables.
- 3. Quality of consortium and efficiency of implementation (threshold 3, weight 2):** assesses the extent to which the consortium composition includes the critical mass and diversity of competencies and infrastructure required for the successful completion of the defined tasks, as well as the quality of the work plan.
- 4. Potential impact (threshold 3, weight 2):** assesses the extent to which the final deliverables of the proposed project may provide a direct benefit to the AAL target base (specific groups of end-users, businesses, and stakeholders).

Conclusions

- **Technical communication: key issues presented**
- **Technical writing involves the same process as for Making technical presentations (Start, Middle, Ending) but everything must now be written instead of having two parts (ppt slides + verbal presentation)**
- **Producing technical posters and Research Proposals, etc also introduced**
- **Process only started and communication skills improve with practice**

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