- The Technical Report is a <u>legal document</u>, generally the main referred attachment to any contract in technical businesses.
- It is the <u>basic document</u>. All others ( namely: drawings, calculations, specifications, softwares, etc. ) are its attachments, referred at its proper chapters and/or articles.
- It is the <u>document of undestanding</u> (Why? and How?). All that are described in details in the attachments are mentioned in it for highlighting and/or comprehension only.
- Occasionly it can exceed more hundreds or thousands of pages at <u>large-scale</u> projects.
- Its language should be compact, <u>factual</u> and purposeful ( you should think of the lawyers, translators, decision makers – not being professionals of technologies described ).
- It is neither an autobiography nor a confession! Its should be <u>impersonal</u>. Verbs should be used with passive force, but at least "I" and "you" should be avoided.

- Any factual data should be presented once and only once. (In case of any change partly corrected – and contradicting – new-old data may disturb understanding and may drive to future disputes.)
- TR is prepared keeping in mind that ,,a good product also needs to be sold". ( cover photo, project symbol/emblem, watermark, etc. )
- Colored figures and diverse typography can help understanding, but too many colors or abundant type-facing may draw attention away or may appear fribblish.
- Table of <u>Content</u> and List of referred <u>Attachments</u> at the beginning are evident, while Index and Glossary at the end are welcome helpful facilities.
- Heading and footing (page identification)
- Registered empty pages bound to the end tends to be usual ( Change Management )
- Proper extraction (Summary or Overview) has great importance (Decision makers)

- It is purposefully broken down to referable units and chapters identified in a decimal system. Its pages are numbered in an overall or by-unit continuous numbering system;
- Main units and chapters, respectively:
  - Document identification ( outer and inner front page, serial number, signature sheet )
  - List of attachments ( reference codes )
  - Table of contents ( page numbers )
  - Preliminaries ( contractual embedding )
    - = Environmental study ( introducing the human and natural environment )
    - = Comprehensive introduction of the building (functions, sizes, strengths, structures, material, finishes)
    - = Project aims ( introducing the task )
    - = Conditions of projecting ( regulations, terms, standards, restrictions )
    - = Main considerations and functions of projecting ( preferences )

- Introducing and explaining projecting methodology used
  - = Basic terms, assumptions, algorithms, models, softwares, etc.
  - = Databases, collections ( standards, rules, recommendations )
  - = Displaying results ( interpretations, terms, keys, legends, forms, symbols )
- Detailed description of results in a meaningful technical or sequential order ( if possible ) e.g.:
  - = Off-site works, logistics, pre-fabrication
  - = Site preparation (getting the site)
  - = Site layout design ( temporary supplies, stores and structures )
  - = Sub-structural ( underground ) works
  - = Structural works
  - = Building services ( inner infrastructure )
    ≡ Power supply ( any and all kinds of )
    ≡ Plumbing ( communal/technical )

= Heating, air-conditioning (HVAC)

 $\equiv$  Stairs and elevators

= Finishing and cladding works

- = Fire protection, emergency exit
- = Building electronics ( comminucation )
- = Landscaping ( off-building works )
- = Joint ( off-site ) works
- = Labour safety (risks)
- = Environment protection (hazards)
- = Quality management (ISO)
- Contraction
  - = Site management and on-site
    - management
      - ≡ Time and space ( site ) management
      - $\equiv$  Techniques and technologies
      - $\equiv$  Main resources ( peak needs )
      - $\equiv$  Structures, material (suppliers)
      - $\equiv$  Significant quantities and capacities
  - = Economics and efficiency overview
- Index and glossary