

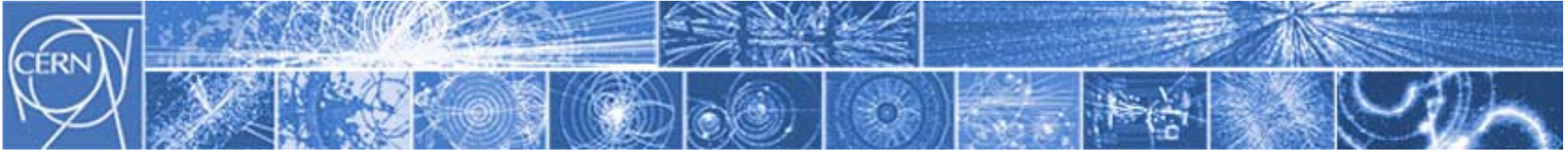


# **Report on best value for money (BVFM) at CERN**

Cristina Lara

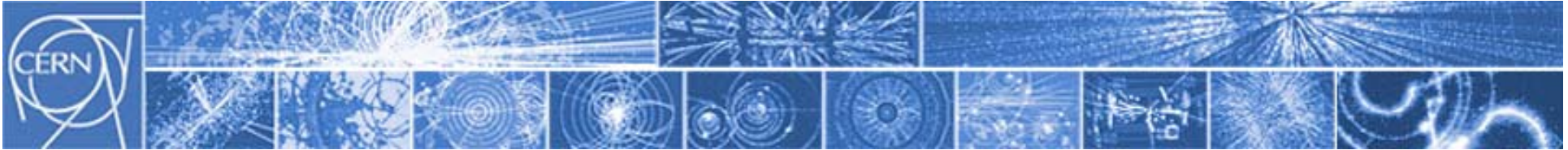
16th September 2008

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# History

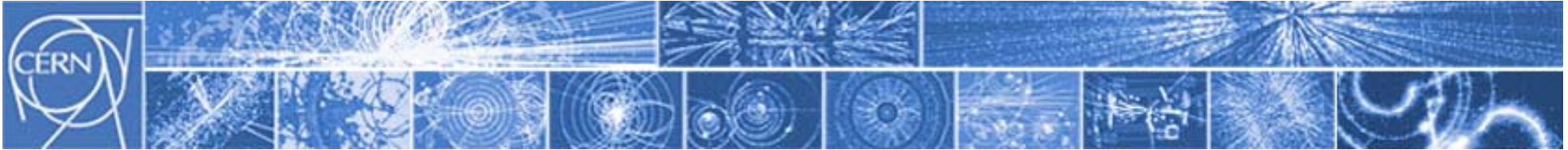
- FC agreed to the principle of **BVFM** for a trial period for the adjudication of Industrial Services contracts and, subject to prior FC approval, for certain supply contracts.



## Summary of the procedure

- At the **Market Survey** stage: The document explaining the realignment is no longer attached.
- **Invitation to tender** :
  - Adjudication criteria and their corresponding weight shall be defined as follows:

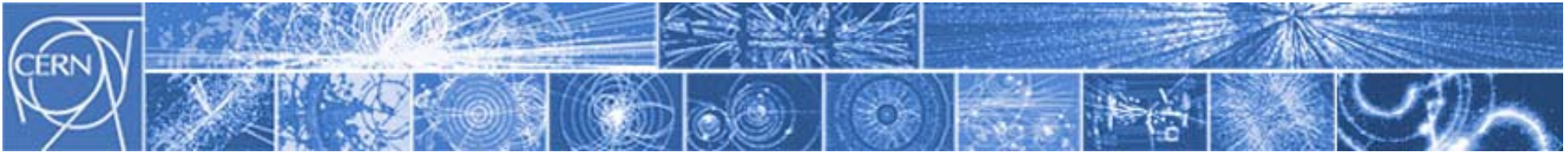
Criterion	Weight (guideline)
Price	Minimum 50
Quality (each criterion and corresponding weight is provided)	Maximum 50
TOTAL	100



## Scoring of quality criteria

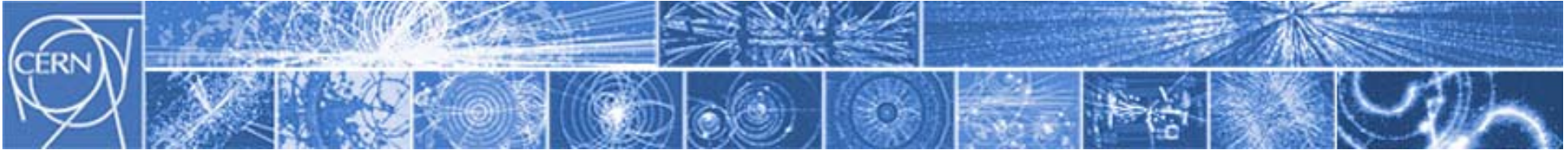
- 4 = excellent
- 3 = good
- 2 = satisfactory
- 1 = poor
- 0 = insufficient

The basis on which each criterion will be scored is defined **before sending the IT** by the technical responsible, his Group and Department Leader as well as the purchaser in charge as follows:



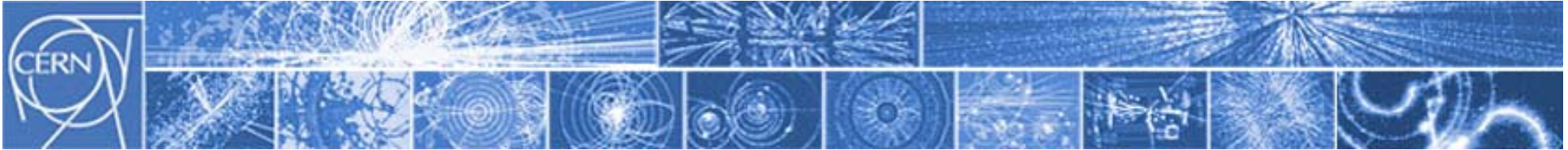
# Examples of scoring (1)

Criterion	4	3	2	1	0
Organisation proposed	-1 contract manager -1 maintenance manager -1 op. manager -4 team leaders	-1 contract manager -1 maint. and op. manager -4 team leaders	-1 contract manager -1 maint. and op. manager -3 team leaders	-1 contract manager -1 maint. and op. manager -2 team leaders	Less than 1
QAP proposed	Excellent regarding: -Adequacy with CERN's needs -Details provided -Level of norms proposed -Quality of doc	Good regarding: -Adequacy with CERN's needs -Details provided -Level of norms proposed -Quality of doc	Satisfactory regarding: -Adequacy with CERN's needs -Details provided -Level of norms proposed -Quality of doc	Poor regarding: -Adequacy with CERN's needs -Details provided -Level of norms proposed -Quality of doc	Less than 1



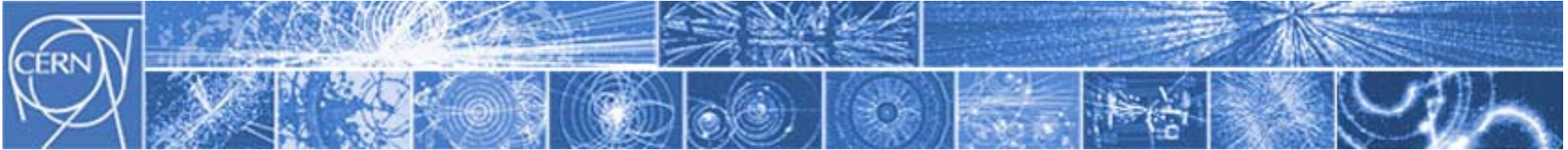
# Examples of scoring (2)

Criterion	Quality score (0 to 4 points per criterion)
Technical supervisor	1 for tech. engineer in electromechanical eng. (or national equivalent) 2 for 5 years experience in the field concerned (pro rata per year) 0.5 for 5 years experience working in env. requiring cat. B workers (pro rata per year) 0.5 for 5 years experience in maintenance of the equip. concerned (pro rata per year)
Bidder's experience	2 references, max 2 points per reference: 1 point if technically relevant 0.5 if comparable in value (pro rata to value) 0.5 if terminated less than 3 years ago
Experienced personnel during shut-down	0.08 points per % above the required 50% of personnel with experience from previous shut-down
Capacity to absorb volume variations	0.X points per professional provided with a 2 weeks notice 0.X points per professional provided within one month notice 0.X points per professional provided within two months notice



# Evaluation of offers

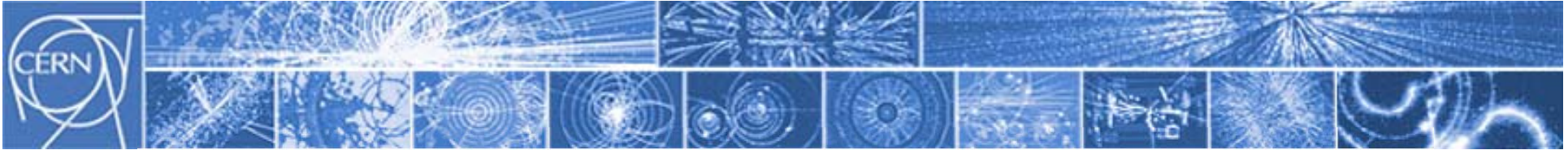
- Only **compliant offers** will be assessed by the **evaluation panel** which consists of:
  - technical responsible and his Group Leader
  - any technical expert appointed by the Technical Department
  - the purchaser
- After the opening of the offers, the evaluation panel meets to score the offers according to the scoring table.



## BVFM adjudications (in chronological order)

- IT-3482/TT for the provision of patents and trademarks attorney services (March 2008)
- IT-3563/DSU for the design and construction of a new travelling exhibition (June FC)
- IT-3556/TS for the provision of locksmith services (June 2008)

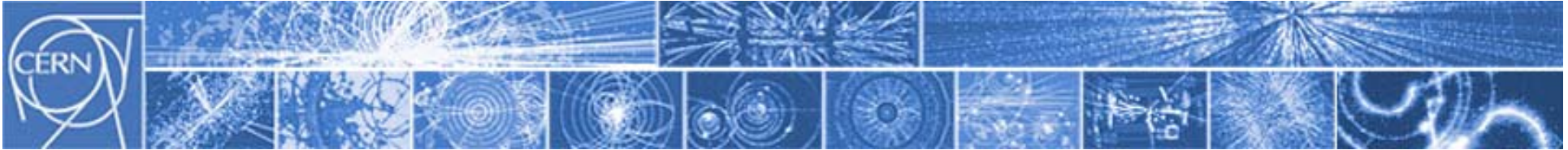




## IT-3482/TT - Patents and trademarks attorneys

- Provision of patents and trademarks attorney services for the protection of CERN's intellectual property
- Quality criteria and weights:

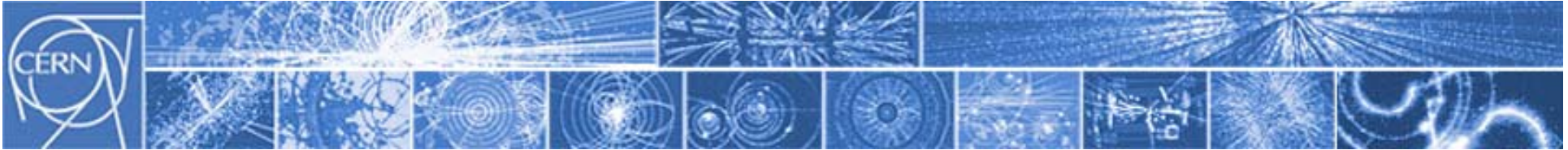
Criterion	Weight
Price	50
Quality:	
Organisation and operating methods	10
Experience/ references	15
Added value services	10
Overall quality of the offer	15
Total	100



# Ranking table for IT-3482/TT

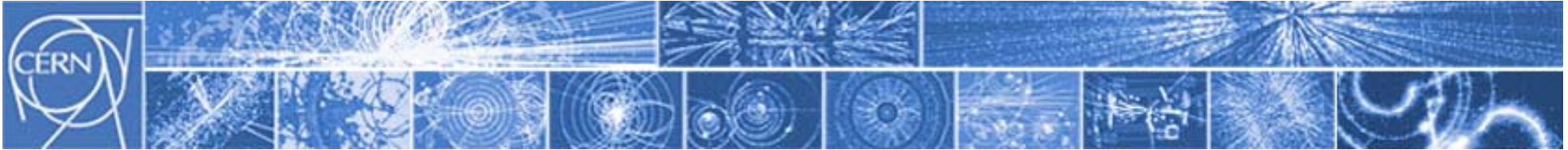
	<b>Firms</b>	<b>Pronovem (BE)</b>	<b>Boehmert &amp; Boehmert (DE)</b>	<b>Cabinet Plasseraud (FR)</b>	<b>Kilburn Strode (GB)</b>	<b>Barzano &amp; Zanardo (IT)</b>
(a)	Quality score	131.60	150.00	163.30	173.30	123.30
(b)	<b>Adjusted quality score:</b> (a)/highest quality score	75.94%	86.56%	94.23%	100%	71.15%
(c)	Quality weighting	50	50	50	50	50
(d)	<b>Weighted quality score (b)*(c)</b>	<b>37.97</b>	<b>43.28</b>	<b>47.11</b>	<b>50.00</b>	<b>35.57</b>
(e)	Price for adjudication (CHF)	374,774.37	227,243.59	487,543.75	456,754.33	259,138.14
(f)	<b>Adjusted price score:</b> Price of the lowest offer/(e)	60.63%	100%	46.61%	49.75%	87.69%
(g)	Price weighting	50	50	50	50	50
(h)	<b>Weighted price score (f)*(g)</b>	<b>30.32</b>	<b>50.00</b>	<b>23.30</b>	<b>24.88</b>	<b>43.85</b>
(i)	<b>Total weighted score (d) + (h)</b>	<b>68.29</b>	<b>93.28</b>	<b>70.42</b>	<b>74.88</b>	<b>79.42</b>
(j)	<b>Overall ranking</b>	5	1	4	3	2

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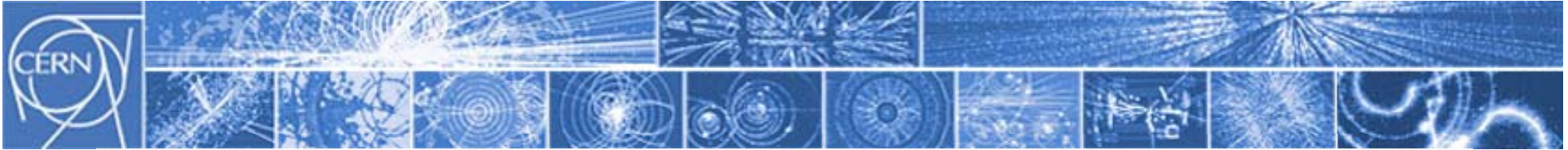
## IT-3482/TT – Conclusions (1)

- Very satisfactory adjudication: contract adjudicated to the bidder offering the best compromise between price and quality.
  - The **selected offer** is the lowest and **12% lower** than the offer ranked 2<sup>nd</sup> and with a better quality score than the latter.
  - The selected offer is **half the price** of the offer ranked **first** for the quality (13% difference).



## IT-3482/TT – Conclusions (2)

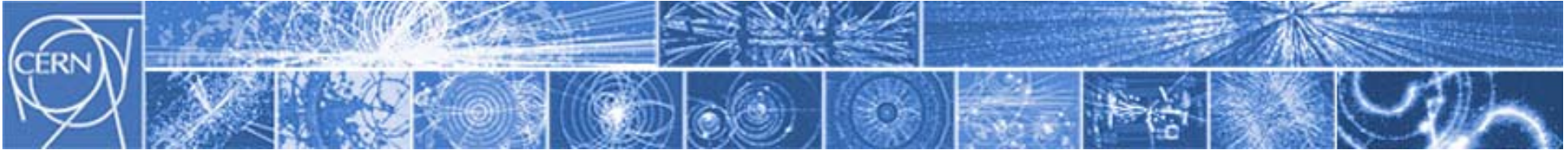
- Lesson for future ITs:
  - To assess the criterion “References” questionnaires were requested to be filled in **by the bidder’s clients**. This was not conclusive as all of them were “good” or “excellent”. Alternative: ask bidders to provide the contact name of their references and CERN contacts them directly with a predefined questionnaire.



# IT-3563/DSU - Design and construction of a new travelling exhibition

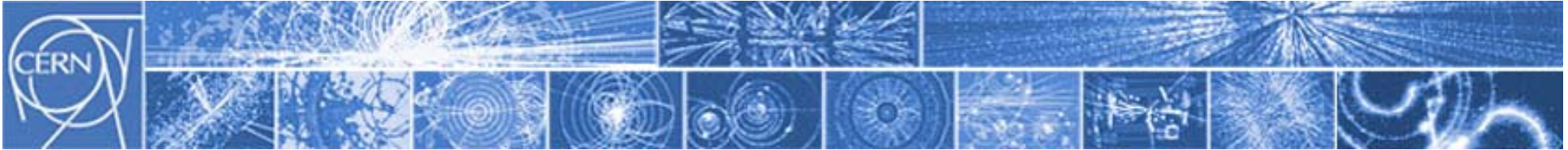
- Quality criteria and weights:

Criterion	Weight
Price	50
Quality:	
Exhibition entrance and Cosmology section (tunnel)	10
Proposed overall design	15
Technical perimeter (enclosure)	8
Physical implementation (sturdiness, modularity, language change, packaging, packaged volume and ease of installation/dismantling)	10
General impression (previous projects, team, planning and subcontractors)	7
Total	100



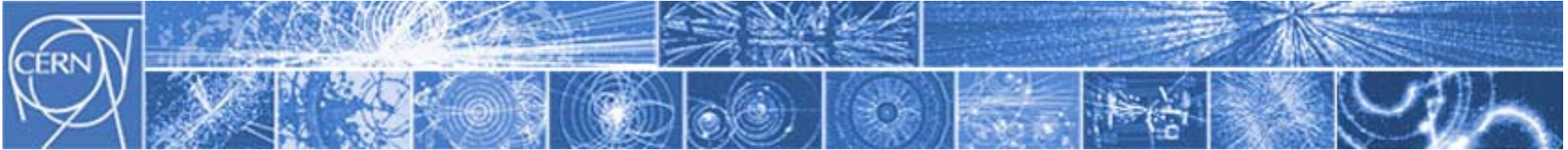
# Ranking table for IT-3563/DSU

		HÜTTINGER (DE)	NORTHERN LIGHT/ BRUNS (NL)	SHELTON FLEMING (GB)
(a)	Quality score	90.75	133.25	162.00
(b)	<b>Adjusted quality score:</b> (a)/highest quality score	56.02 %	82.25 %	100 %
(c)	Quality weighting	50	50	50
(d)	<b>Weighted quality score (b)*(c)</b>	<b>28.01</b>	<b>41.13</b>	<b>50.00</b>
(e)	Price (CHF)	800 684.40	928 843.74	917 515.70
(f)	<b>Adjusted price score:</b> Price of the lowest offer/(e)	100.00 %	86.20 %	87.27 %
(g)	Price weighting	50	50	50
(h)	<b>Weighted price score (f)*(g)</b>	<b>50.00</b>	<b>43.10</b>	<b>43.63</b>
(i)	<b>Total weighted score (d) + (h)</b>	<b>78.01</b>	<b>84.23</b>	<b>93.63</b>
(j)	<b>Overall ranking</b>	<b>3</b>	<b>2</b>	<b>1</b>



# IT-3563/DSU – Conclusions (1)

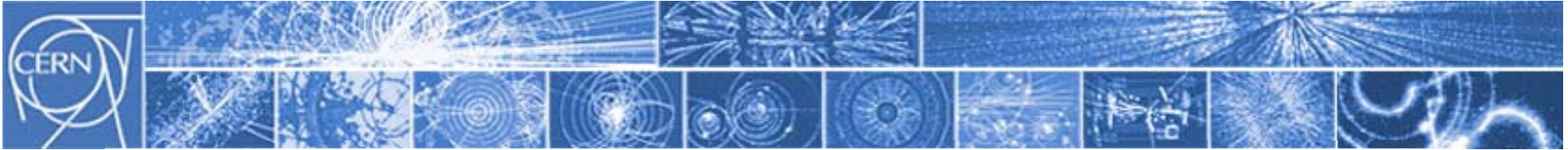
- Again very satisfactory adjudication:
  - Contract adjudicated to the **best design**, showing a good understanding of the issues to be communicated and with a **good implementation** (modularity, language options and ease of installation). The selected offer is 14% more expensive than the lowest offer which proposed a too simple design (mainly based on flexible panels).



## IT-3563/DSU – Conclusions (2)

- **Lesson:** in order to allow bidders to submit comparable designs the financial envelope has to be provided to bidders at the tendering stage.

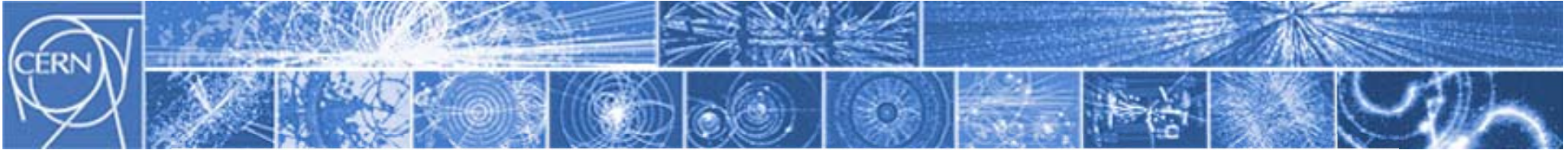




# IT-3528/TS – Permanent exhibition of the Globe (not yet adjudicated)

- Proposed quality criteria and weights

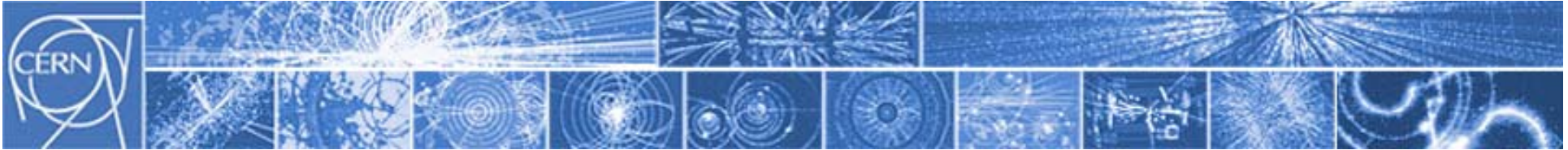
Criterion	Weight
Price	2MCHF
Quality:	
Integration and adaptation into Globe architecture	23
Proposed overall design	23
“Wow” factor	23
Interactivity and multimedia propositions	8
Physical implementation	8
The company and the team, planning and timetable	15
Total	100



# IT-3556/TS - Provision of locksmith services

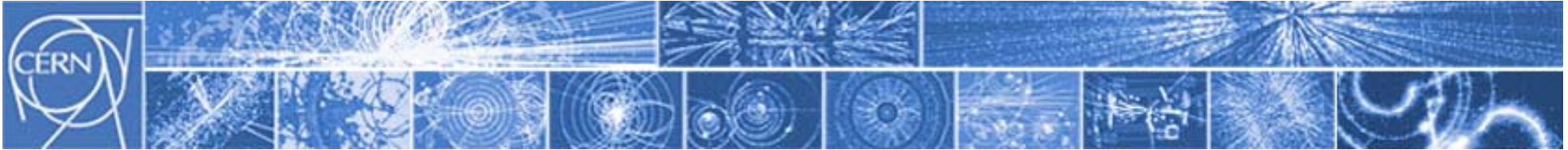
- Quality criteria and weights:

Criterion	Weight
Price	50
Quality:	
Number of hours foreseen	20
References	10
Quality of the offer	15
Security	5
Total	100



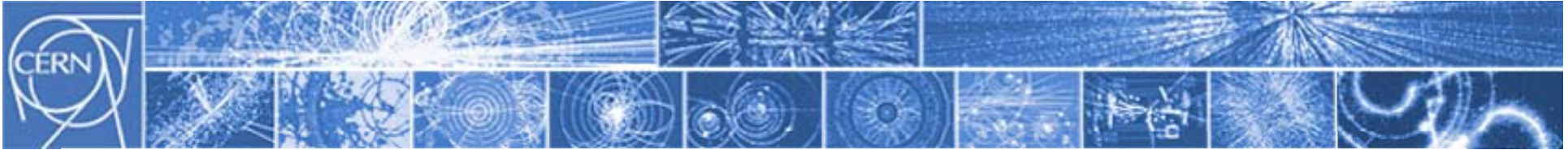
# Ranking table for IT-3556/TS

	Firms	GMF	DCS	NET INTER
(a)	Quality score	110.00	110.00	105.00
(b)	Adjusted quality score: $(a)/\text{highest quality score}$	100.00%	100.00%	95.45%
(c)	Quality weighting	50	50	50
(d)	<b>Weighted quality score (b)*(c)</b>	<b>50.00</b>	<b>50.00</b>	<b>47.73</b>
(e)	Price (CHF)	500,212.93	608,486.00	870,300.00
(f)	Adjusted price score: $\text{Price of the lowest offer} / (e)$	100.00%	82.21%	57.48%
(g)	Price weighting	50	50	50
(h)	<b>Weighted price score (f)*(g)</b>	<b>50.00</b>	<b>41.10</b>	<b>28.74</b>
(i)	<b>Total weighted score (d) + (h)</b>	<b>100.00</b>	<b>91.10</b>	<b>76.47</b>
(j)	<b>Overall ranking</b>	<b>1</b>	<b>2</b>	<b>3</b>



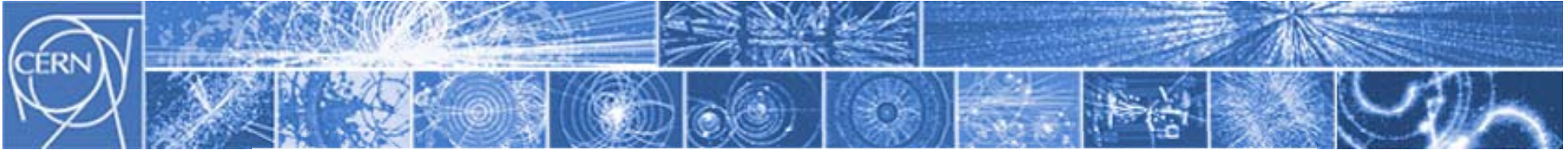
## IT-3556/TS - Conclusions

- During the trial period we applied BVFM for this IT.
- Lesson for future ITs: **BVFM not really needed** for this type of contract (low skilled personnel required, experienced personnel not necessary) as no added value is brought.



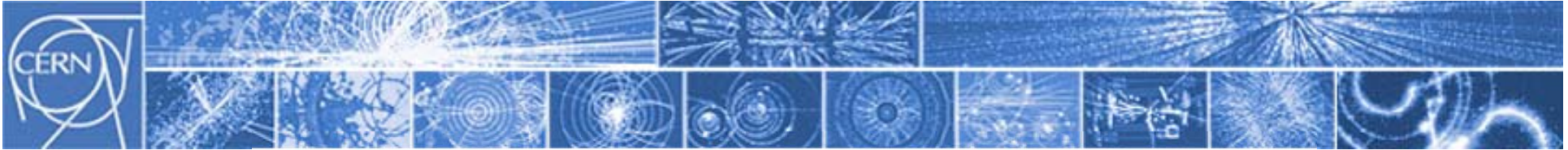
## General conclusions and lessons learned (1)

- Adjudications are time consuming as all offers have to be analysed BUT CERN's needs and expectations are met:
  - Consortia only established for **technical** and not political reasons;
  - Contracts have been awarded to the bidder proposing the best quality at a **reasonable** price.
- Key issues to take into account:
  - Before launching the MS, assess the **appropriateness** of adjudicating a contract on a BVFM basis.
  - Importance of selecting the **relevant criteria** and their corresponding **weights** for each IT.
  - Importance of the **confidentiality** of the scoring table prepared before launching IT.



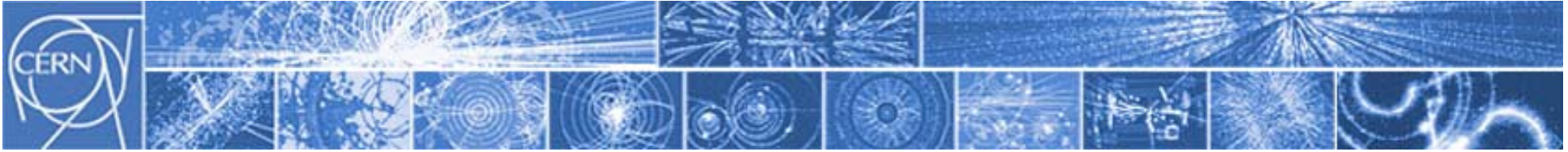
## General conclusions and lessons learned (2)

- Suggested improvements to the procedure:
  - Apply the **double envelope** procedure systematically;
  - Assess the criterion “references” through **questionnaires filled in by CERN** after contacting the bidder’s clients directly.



## General conclusions and lessons learned(3)

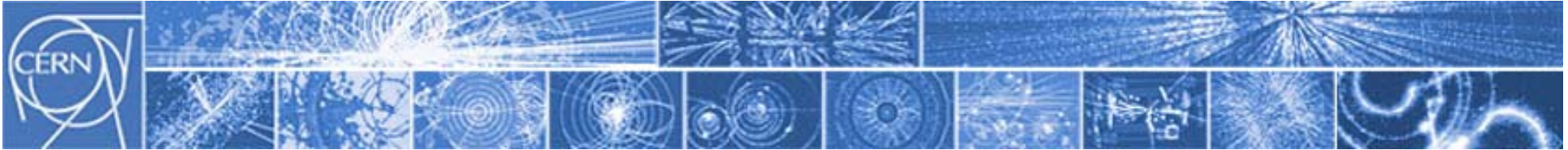
- Whenever needed, invite bidders to **present their technical offer** before the scoring;
- Whenever a criterion cannot be scored mathematically, calculate **average scores** of the evaluation panel members;
- Oblige bidders to provide in the “**evaluation questionnaire**” sent with IT all the elements required for the evaluation of the offer.



## Forthcoming adjudications

- IT-3499/IT for the provision of transport and handling services
- IT-3551/TS for the provision of civil engineering supervision services for LINAC4
- IT-3560/TS water treatment and demineralised water production





## Forthcoming ITs on BVFM adjudication basis:

- Vacuum support activities
- Desktop support activities
- Maintenance of cryogenics installations
- Electrical works
- Globe permanent exhibition