ILC-HiGrade
3rd Scientific Meeting

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ILC-HiGrade – Reminder

- ILC-HiGrade is the Preparatory Phase project of the European Commission to work towards the realisation of the **International Linear Collider**.

- The project is one of 30+ projects on the ESFRI list (via C.E.R.N. Council strategy) technically mature to be constructed.

- It addresses

  - a key technical component that affects the cost, i.e.
    SRF gradient with a goal of running the ILC at 31.5 MV/m

  - the formation of governance and financial structures in Europe that enable the realisation of the project. The European Commission recognises that this is a process with global implications

ILC-HiGrade – Brief Account of Reporting

- Start of project Feb 1, 2008
- Kick-off meeting, Aug 29, 2008
- End of 1st Reporting Period: Jan 31, 2009
  - Report was submitted … and accepted
  - Financial statement accepted after long debate
- End of 2nd Reporting Period: Jan 31, 2010
  - Report was submitted and processing held by delays in first report – expect answer soon
- End of 3rd Reporting Period: **Jan 31, 2011**
  - Proceeding according to established procedure; i.e. Work Package Reports required

ILC-HiGrade: Plans for Spending Profile

- Overall budget: 5 M€
  - Flat spending profile
  - Key investments in cavities à la European XFEL
    - purchase only towards the end of the contract
  - Consequently most of the expenditure went into preparation for the cavity purchase and quality control – but not everywhere
- Have to make sure that we are ready for the arrival of the cavities and the funds are properly used

We now have a fair understanding of the timescales.

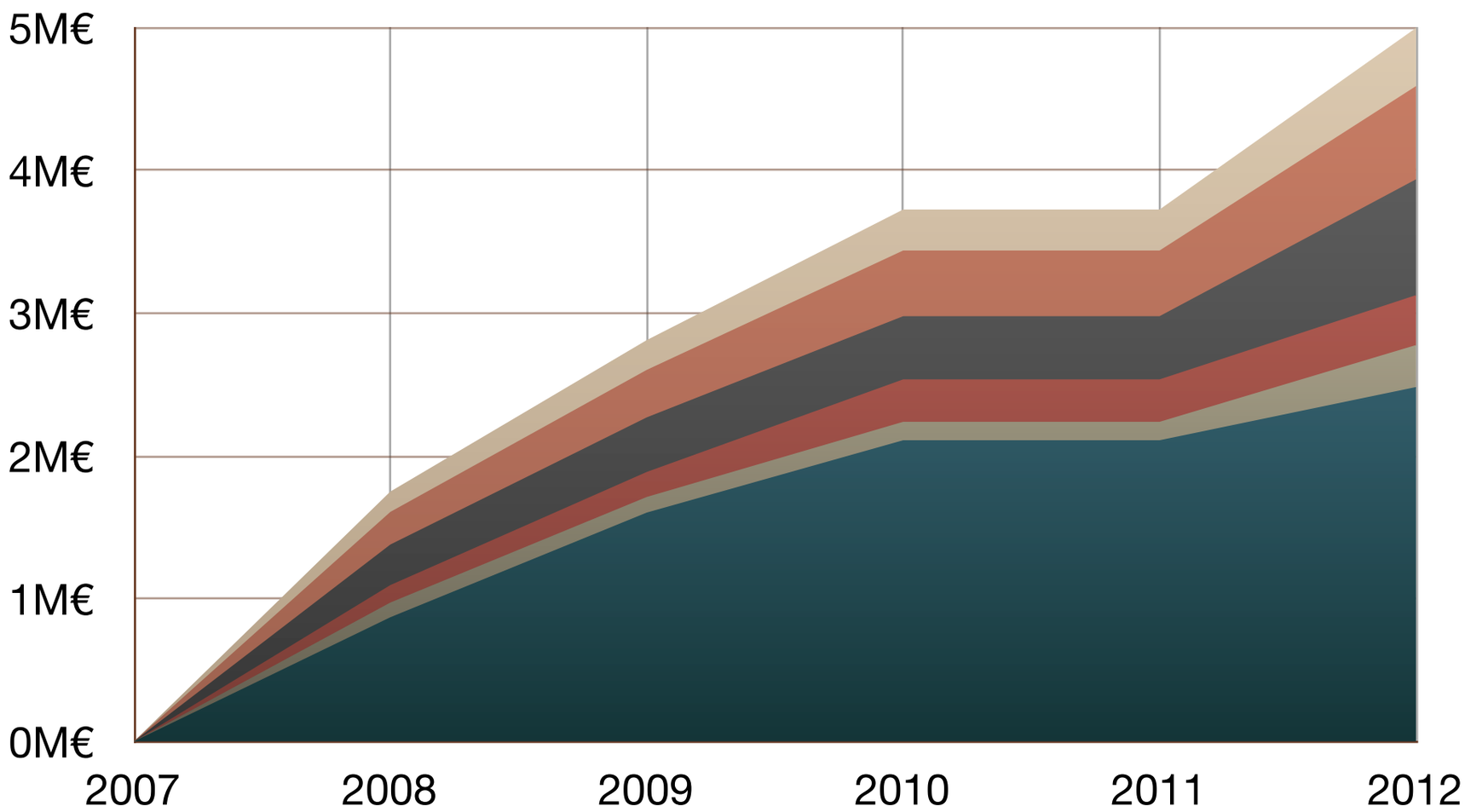
Financing Profile

35%

Pre-financing

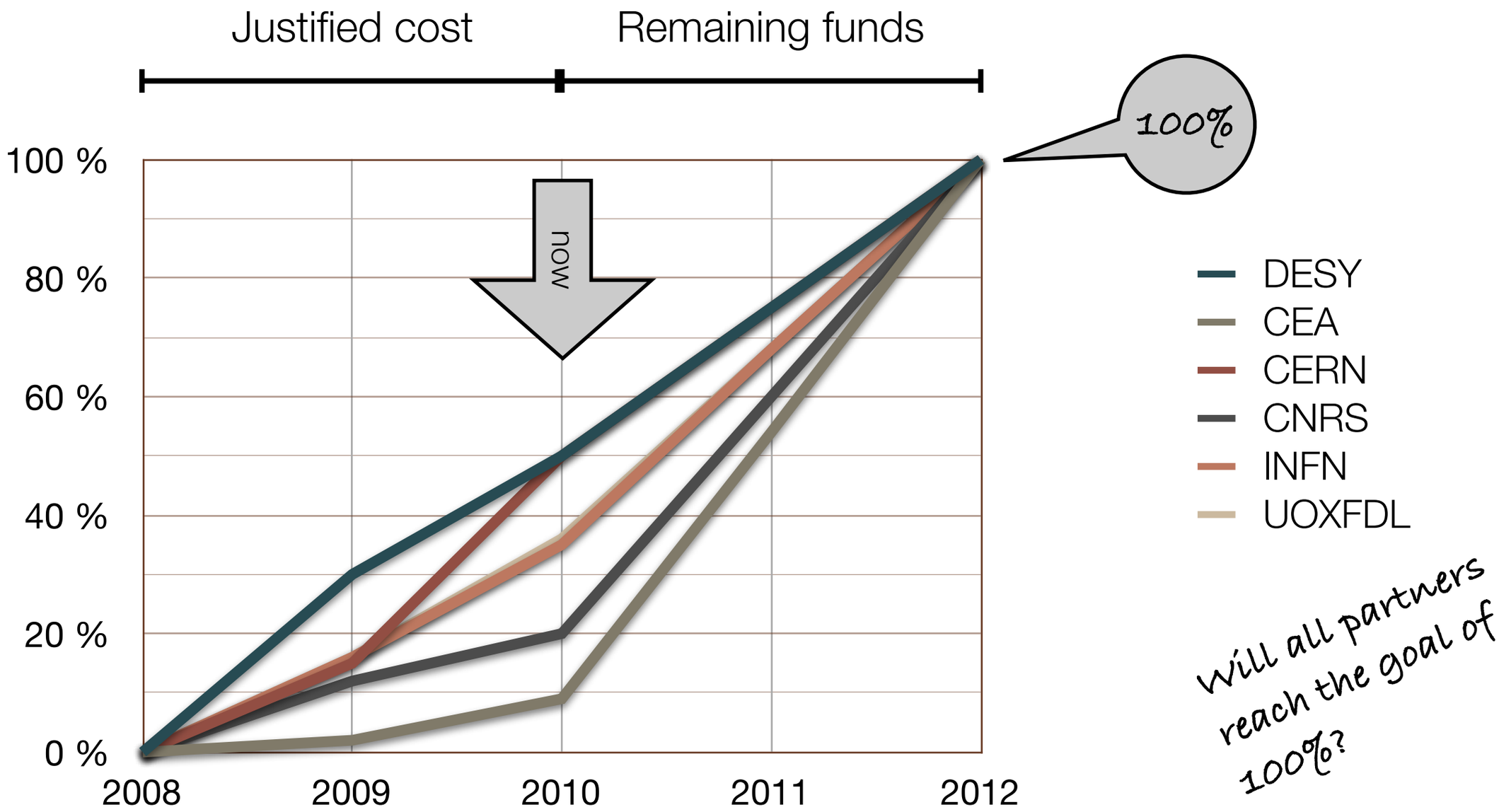
Actual spending and payments

Remaining payments

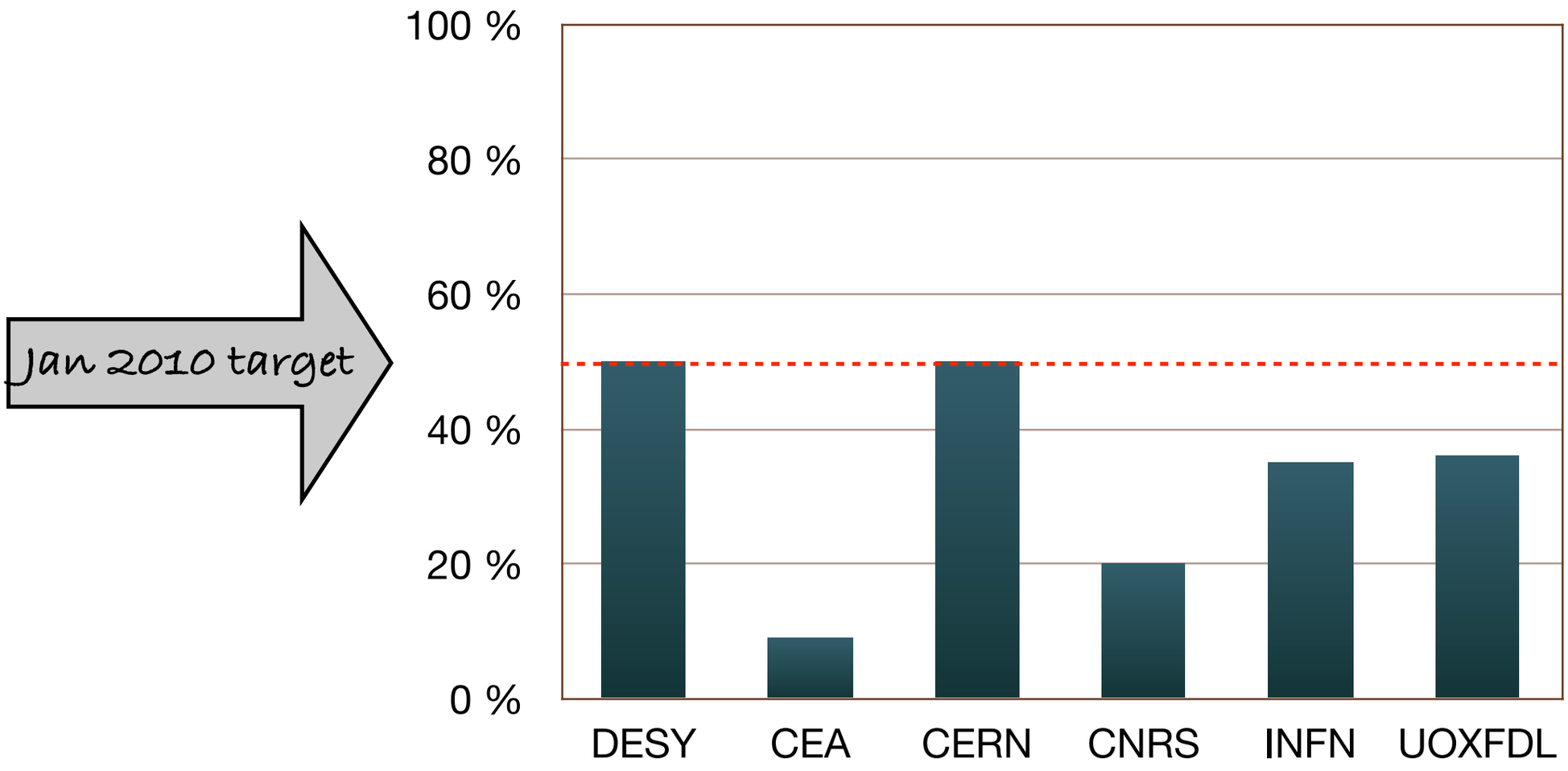


A considerable amount of the funds will soon have been distributed to the partners.

Fraction spent by Institute



Status after 2nd Reporting Period



ILC-HiGrade Work Packages

- WP1: Management of the Consortium
- WP2: Integration and optimization of the European contribution within the global GDE organization as the ILC project moves through the GDE Engineering Design Phase
- WP3: Ensure that the characteristics and importance of the ILC, and its place within the world of science and research, is widely disseminated to the peoples of the European Union, and their governments
- WP4: Investigate features and develop possible schemes of governance for the ILC, exploiting expertise of CERN (LHC) and DESY (HERA) in international projects
- WP5: Prepare and investigate possible European sites for ILC construction
- WP6: Investigate and monitor the production process that yields high-gradient cavities with high yield. Establish the process in industry
- WP7: Optimization of the coupler conditioning at reduced cost
- WP8: Demonstrate suitability of tuner design in tests. Establish a cost-effective tuner production

Work Packages: Involvement of Institutes

Work Package No	Work package title	Type of activity	Lead beneficiary	Person months	Start month	End month	Coordinator
WP1	Management	MGT	1	48	1	48	DESY
WP2	Coordination of European GDE Activity	COORD	6	74	1	48	Oxford
WP3	Dissemination and Outreach	COORD	6	88	1	48	Oxford
WP4	Governance	SUPP	6	87	1	48	Oxford
WP5	ILC Siting in Europe	SUPP	1	42	1	48	DESY
WP6	Cavities	RTD	1	148	1	48	DESY
WP7	Couplers	RTD	4	54	1	48	LAL
WP8	Tuners	RTD	5	30	1	48	Milan
	Total			571			

Number will be larger

Work Packages – Change of Coordinators

Work Package	Title	Coordinator	Lead Institute
WP1	Management	**Elsen**	DESY
WP2	GDE Coordination	**Foster** N.Walker	UOXF.DL
WP3	Dissemination	**Foster** P.Royole-Degieux. & B.Warmbein	UOXF.DL
WP4	Governance	**Foster**	UOXF.DL
WP5	Siting	**Bialowons** J Osborne	DESY
WP6	Cavities	**Aderhold** L. Lilje	DESY
WP7	Couplers	**Lacroix**	LAL
WP8	Tuners	**Pagani**	INFN

ILC-HiGrade and EC interest

- Preparatory Phase of a project refers to "preparing its realization"
  - The EC is encouraging stakeholders to participate and held a series of meetings
  - ECRI2010 Conference on RI in Barcelona
  - ILC-HiGrade represented in poster session

Poster also sent to ASEPS

Next Preparatory Phase

- There is a new call
  Implementation of common solutions for a cluster of ESFRI infrastructures in the field of Physics and Analytical Facilities
  for which the proposals are due in a few days.

  - It addresses primarily projects that are ready for implementation.

- led to **CRISP** proposal (coordinated by ESRF)

  - ILC-HiGrade enters

    - at a small scale (~100k€)

    - via synergy with XFEL cavity QA

Conclusion

- ILC-HiGrade plays a key role in preparing the ILC in Europe
  - Visibility in European Strategy which is to be revisited by 2012
  - ILC-HiGrade stands for the highest possible gradient in a cavity manufactured according to the European XFEL recipe
- This meeting will expose particularly
  - the progress in governance and outreach and include the aspects of European siting
  - the progress in SRF
- We will have to develop the mechanisms of reaching that goal beyond the duration of ILC-HiGrade; the project ends in January 2012