

The slide features a white background with decorative elements. In the top left, there are two solid blue circles of different sizes. On the left side, there is a large, colorful abstract shape composed of overlapping, irregular, organic shapes in shades of blue, green, yellow, purple, and dark grey. The main title is centered in a dark blue, sans-serif font.

BiG Grid at HTC Philips Research

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BiG Grid

the dutch e-science grid

Agenda

- Historical role of Philips Research
- The BiG Grid project
- BiG Grid: where are we now ?
- BiG Grid at Philips Research



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BiG Grid: Historical role of Philips - 1

- Important collaborations:
 - 20 years parallel computing collaboration between Philips Research (Nijman, Odijk, Eggenhuisen) – UvA (Hertzberger)
 - DOOM, PRISMA (Apers(UT), Kersten(CWI))
- Scientific data generation and analysis needs growing, leading to Grid based e-Science projects
 - VL-e (at Philips: Lippman, v.d.Heijden, Obbink)
- National computer infrastructure initiatives
 - Supercomputing through NCF/NWO
 - NL-grid & NL++grid through NCF/NWO/Nikhef/SARA/ RUG
 - VL-e Proof of Concept & NBIC support program BioAssist

BiG Grid: Historical role of Philips - 2

- Set-up a Science Grid to accommodate a wide range of scientific disciplines
 - At Philips: Arie Kaizer & Ronald van Driel
- Proposed in October 2005, granted in July 2006, started in January 2007



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BiG Grid: Mission and Partners

- Founding partners: NCF, Nikhef and NBIC
- “To realise a fully operational world-class and resources-rich grid environment at the national level in the Netherlands to serve public scientific research, including particle physics, life sciences and all other disciplines, and to encourage actively general grid usage across all disciplines”
- This includes collaboration with industry for pre-competitive research
- Expected operational partners:
 - SARA, Nikhef, Philips Research, CIT-RUG, ...



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BiG Grid: Where are we now ?

- 2007:
 - Set-up of organisation and hardware procurement model
- 2008:
 - Forefront applications up-and-running (LHC, Lofar close, life sciences pilots)
 - Adoption of best VL-e practices
 - Operational model for applications:
 - Executive Team in place
 - Design and implementation of access procedures
 - Agreements with partners (SARA, Nikhef, Philips Research)
 - Hardware procurement in place:
 - Compute and data storage installations at partner sites
 - Local installations in various life sciences labs (BioAssist)
 - SURFnet collaboration



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BiG Grid at Philips Research - 1

- Data explosion is very relevant in this industry
 - E.g. Medical Instrumentation Design (SPECT detectors, fMRI, ...)
- e-Science enables collaboration:
 - HTC campus offers “open innovation”
 - Collaboration between industry and academics
 - Mutual benefit for both industry and academic groups through cross fertilization, exchange of experiences, teaming up in developments, applying best practices, ...



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BiG Grid at Philips Research - 2

- **BiG Grid at Philips Research**
 - Housing services for compute and storage equipment
 - Representation of Philips Research as Operational Partner
 - Active collaboration on further roll-out of the Dutch Science Grid in the Netherlands
- **Current BiG Grid equipment at Philips Research**
 - 20,000 SPECint2006 CPU capacity (ca. 1650 cores)
 - 100 TB storage
 - 5 generic servers



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BiG Grid congratulates Philips Research

- Congratulations to both Philips Research and BiG Grid itself for reaching this milestone !
- BiG Grid looks forward to collaboration with Philips Research for the next coming years

Thank you !



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