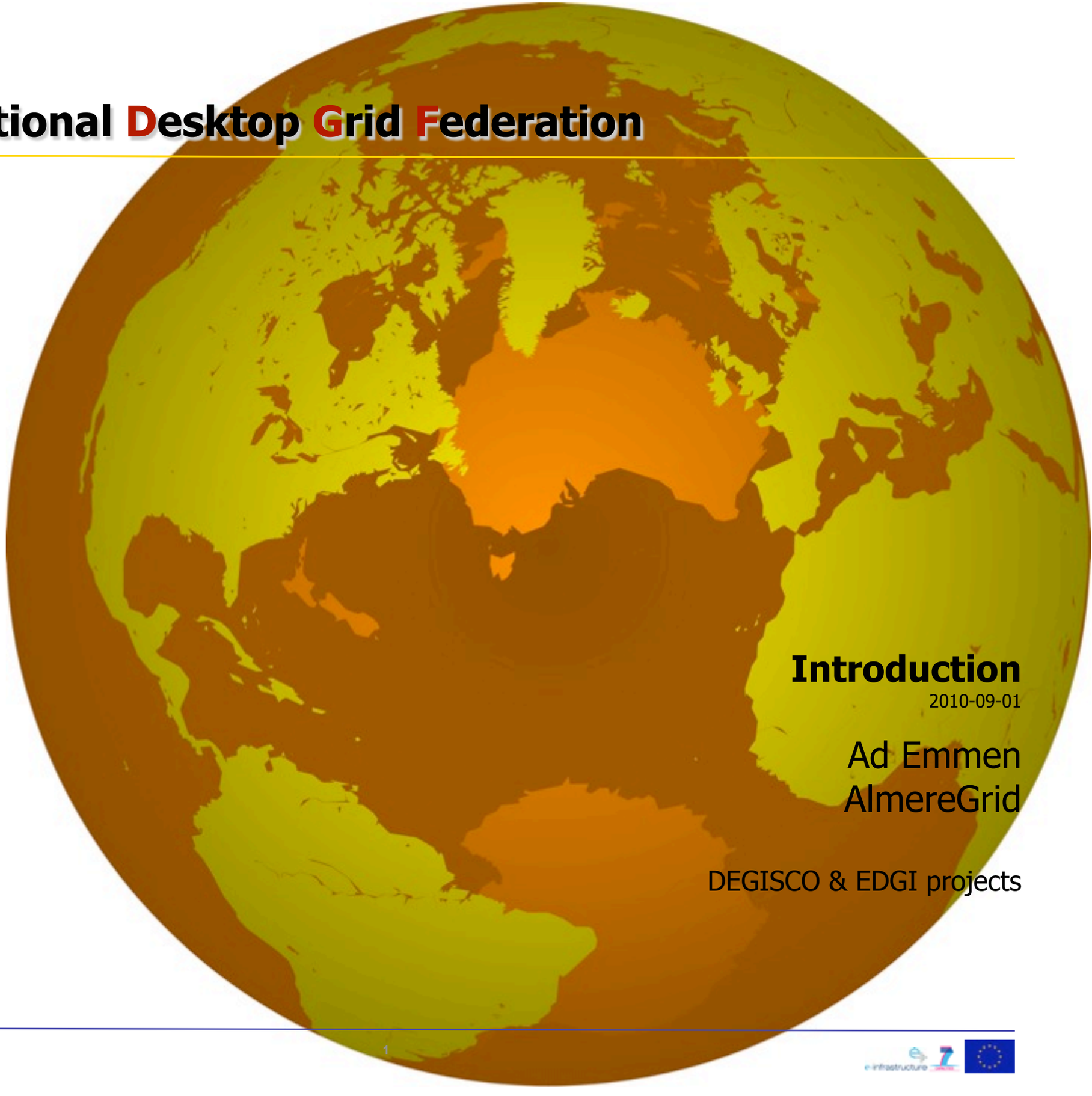
IDGF
International Desktop Grid Federation



Introduction

2010-09-01

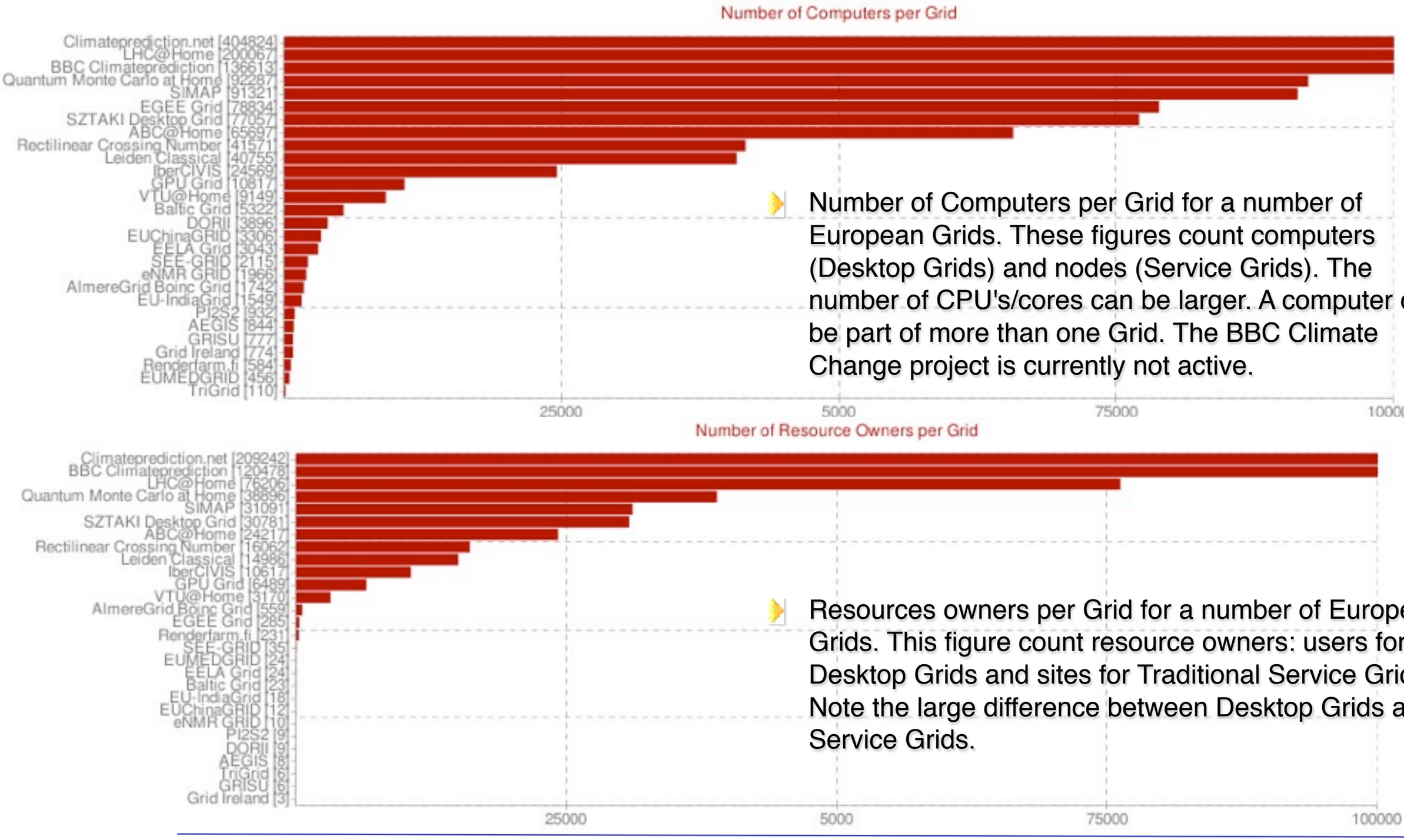
Ad Emmen
AlmereGrid

DEGISCO & EDGI projects

A London room with a view

A London room with a view

Importance of Desktop Grids for Science: http://knowledgebase.e-irg.eu



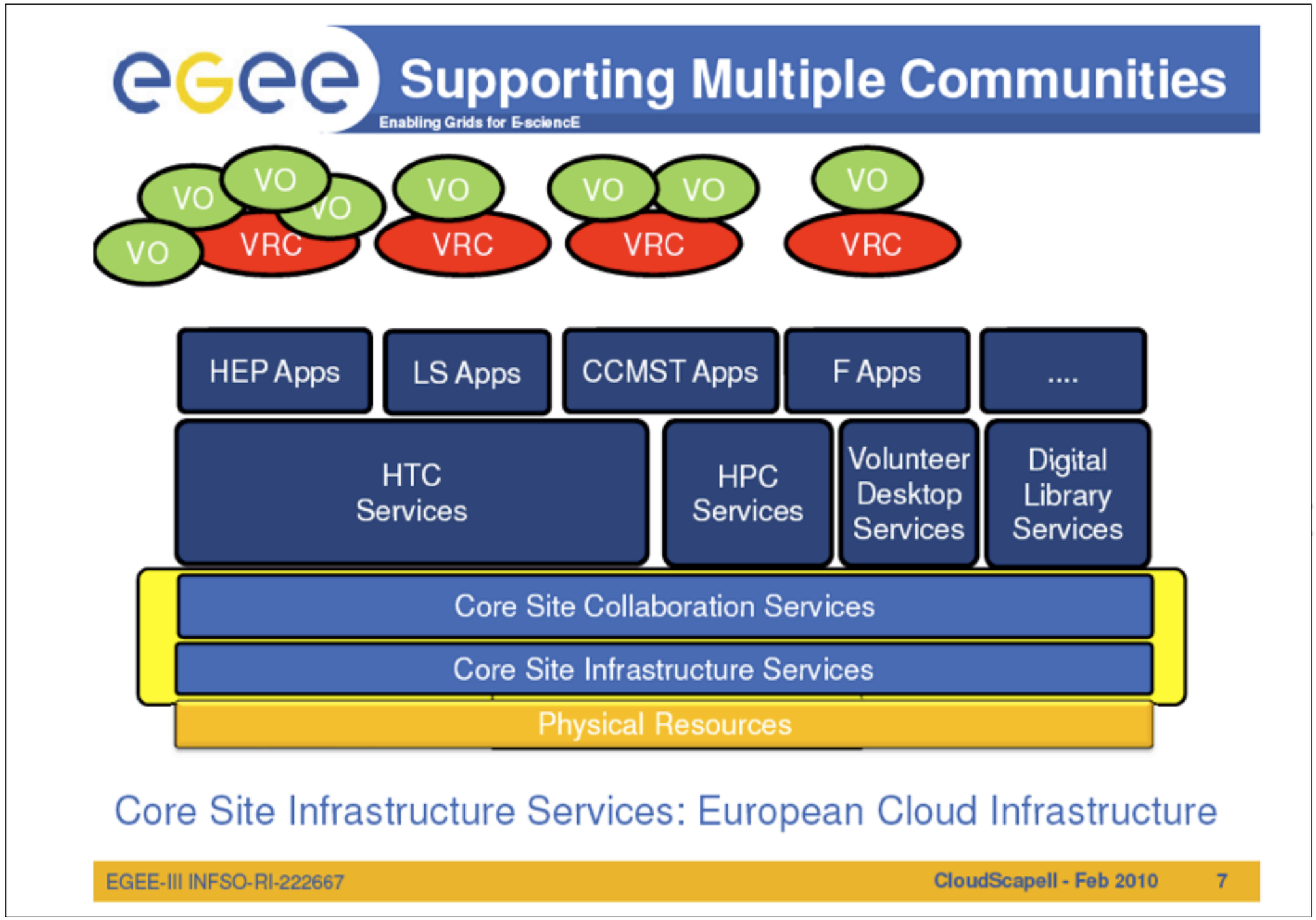
- Number of Computers per Grid for a number of European Grids. These figures count computers (Desktop Grids) and nodes (Service Grids). The number of CPU's/cores can be larger. A computer can be part of more than one Grid. The BBC Climate Change project is currently not active.

- Resources owners per Grid for a number of European Grids. This figure count resource owners: users for Desktop Grids and sites for Traditional Service Grids. Note the large difference between Desktop Grids and Service Grids.

Volunteer Desktop Grids take their place in the eScience ecosystem

- Steven Newhouse
- Director of the European Grid Initiative (EGI)
- February 2010 in Brussels CloudScape II
- European ecosystem for computational support for scientists
- Volunteer Desktop Grids have their place in that ecosystem.

Volunteer Desktop Grids take their place in the eScience ecosystem



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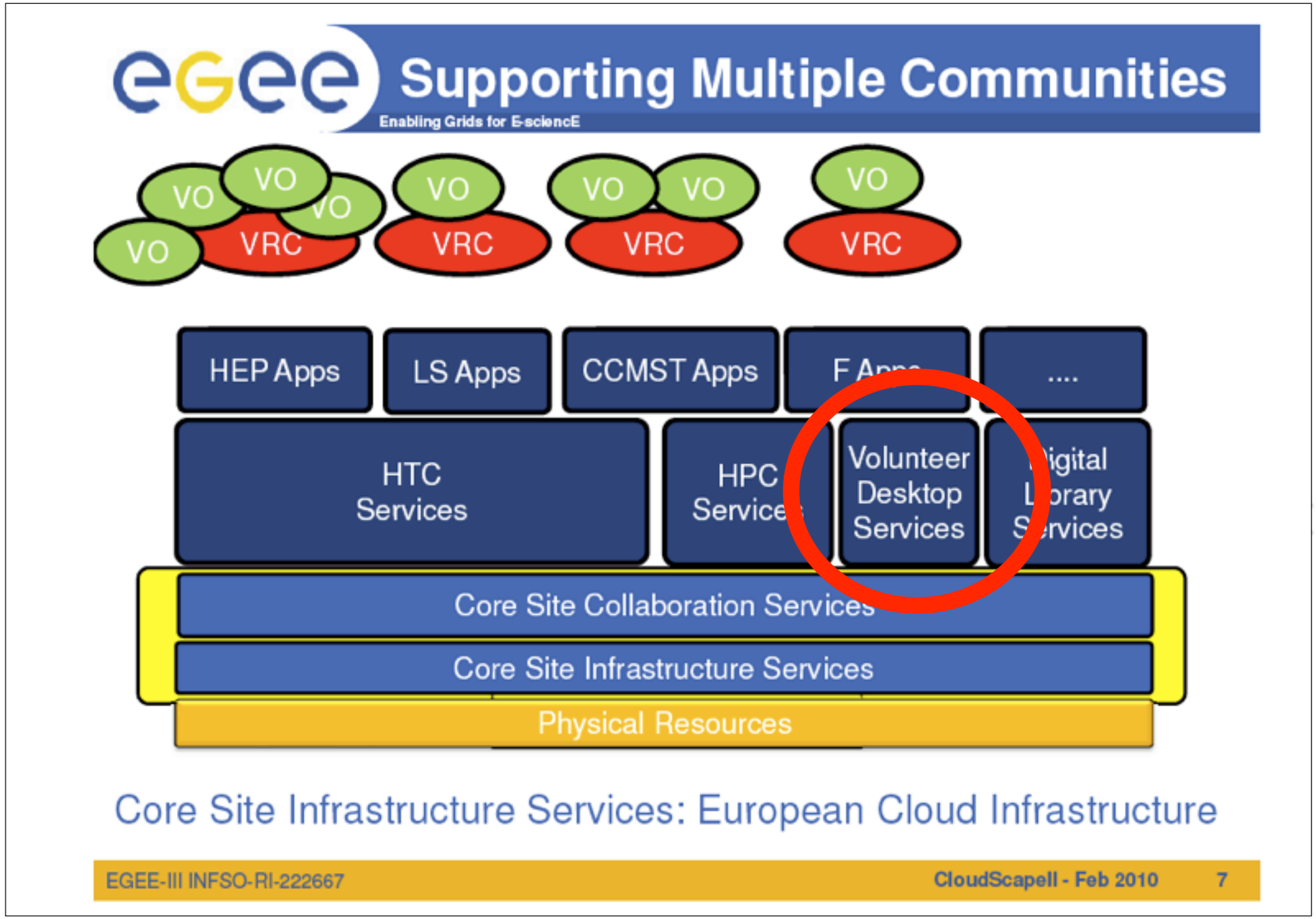

Start dreaming

- Today 5 million computers that at one point in time connected to a volunteer computing grid
  - That is less computers then there are in London
- About 10% are active at each instant of time
  - That is less computers then there are in Westminister
- So that is not really that many
- What if we could increase that tenfold, hundred fold
- What wonderful science could be done...

Stop dreaming

- But dreaming will not get us there
- Hard work, smart work and co-operation can
- It is the *co-operation* that IDGF wants to foster and facilitate
- Co-operation between Desktop Grids, between Desktop Grids and Service Grids/clouds
- Co-operation between Grids and developers, scientific and funding organisations
- Lot of capacity also from local desktop Grids at Universities, institutes. Not volunteer, but planned

Extending the community

- IDGF is not a replacement or competitor for existing cooperations or groups
- Like the pangalactic BOINC workshop
- But it is aimed at extending the community
- Help the community crossing the chasm, and get Volunteer Desktop Grid computing into the main stream
- How?

Providing services for its members

- IDGF is a member organisation
- You can become member, your organisation can, your company can, so do it
- IDGF provides services to its members. Services aimed at improving cooperation between those involved in Desktop Grids:
  - Member administration, including interest group and chapter management
  - Dissemination services
  - News service
  - Discussion fora
  - Support services
  - Meetings and event organisation

Know other members and their area of expertise

- Member administration, including interest group and chapter management
  - There are several interest groups that one can join.
  - Two chapters: European and International
- Dissemination services
  - Tell what you do, know what others do. Share experiences. Joint campaigns
- News service
  - Blog, RSS/Atom, Twitter
  - News for and from members
- Discussion fora

Joint campaigns

- Create material for citizens that works
- If it does: translate and reuse in other countries
- In IDGF already: French, Dutch, Hungarian, Russian, Chinese,Danish, Portugese, Spanish, and even English speakers
- Re-use campaign elements that work:
  - material for schools
  - media campaigns
- Even do joint campaigns

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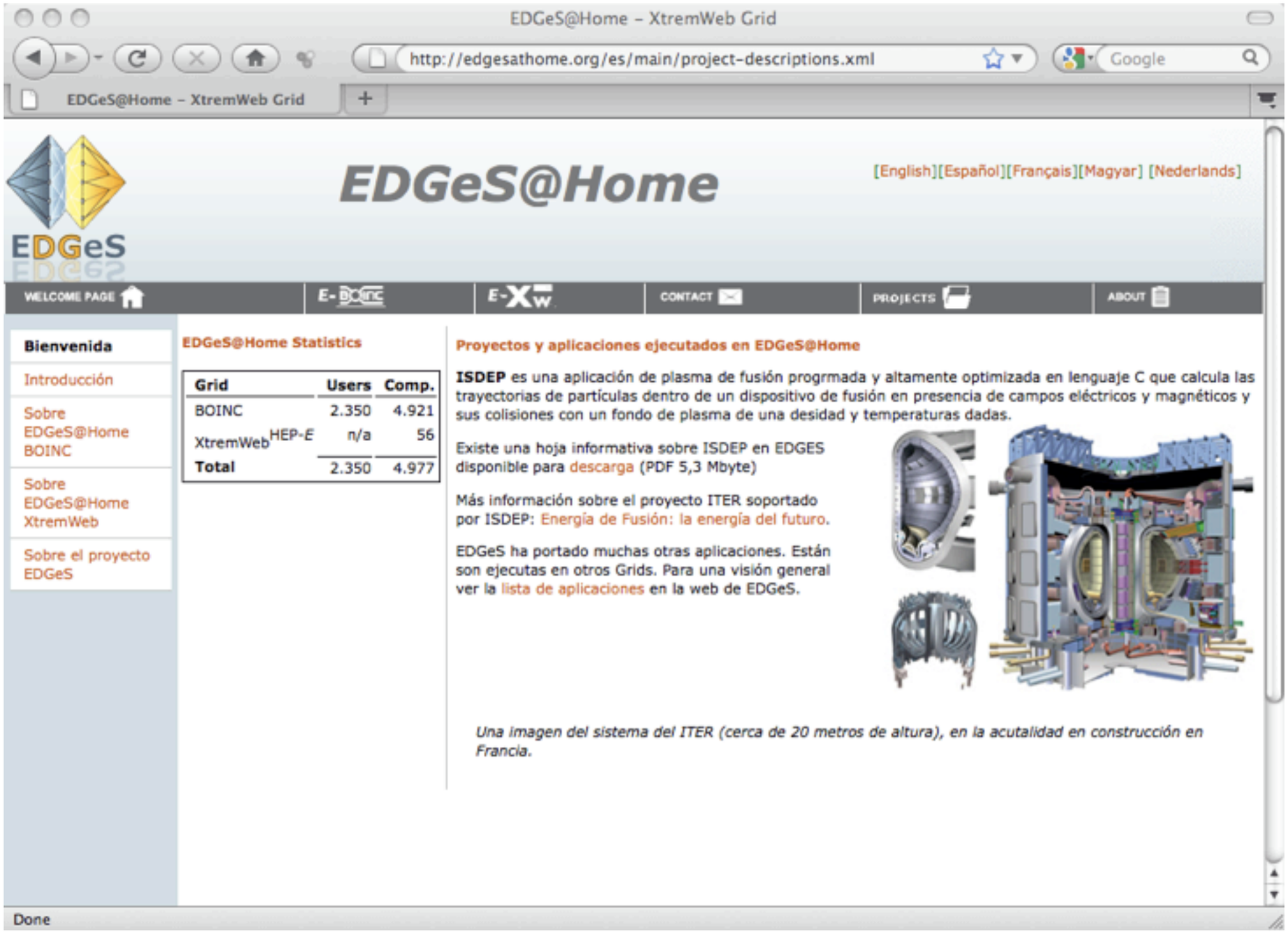
http://www.omroepflevoland.nl/nieuws/recent?NewsKey=5479D73C07E37DA0C12575A5004E84D5

Joint Campaign

EDGeS@Home - Donate to Energy Research



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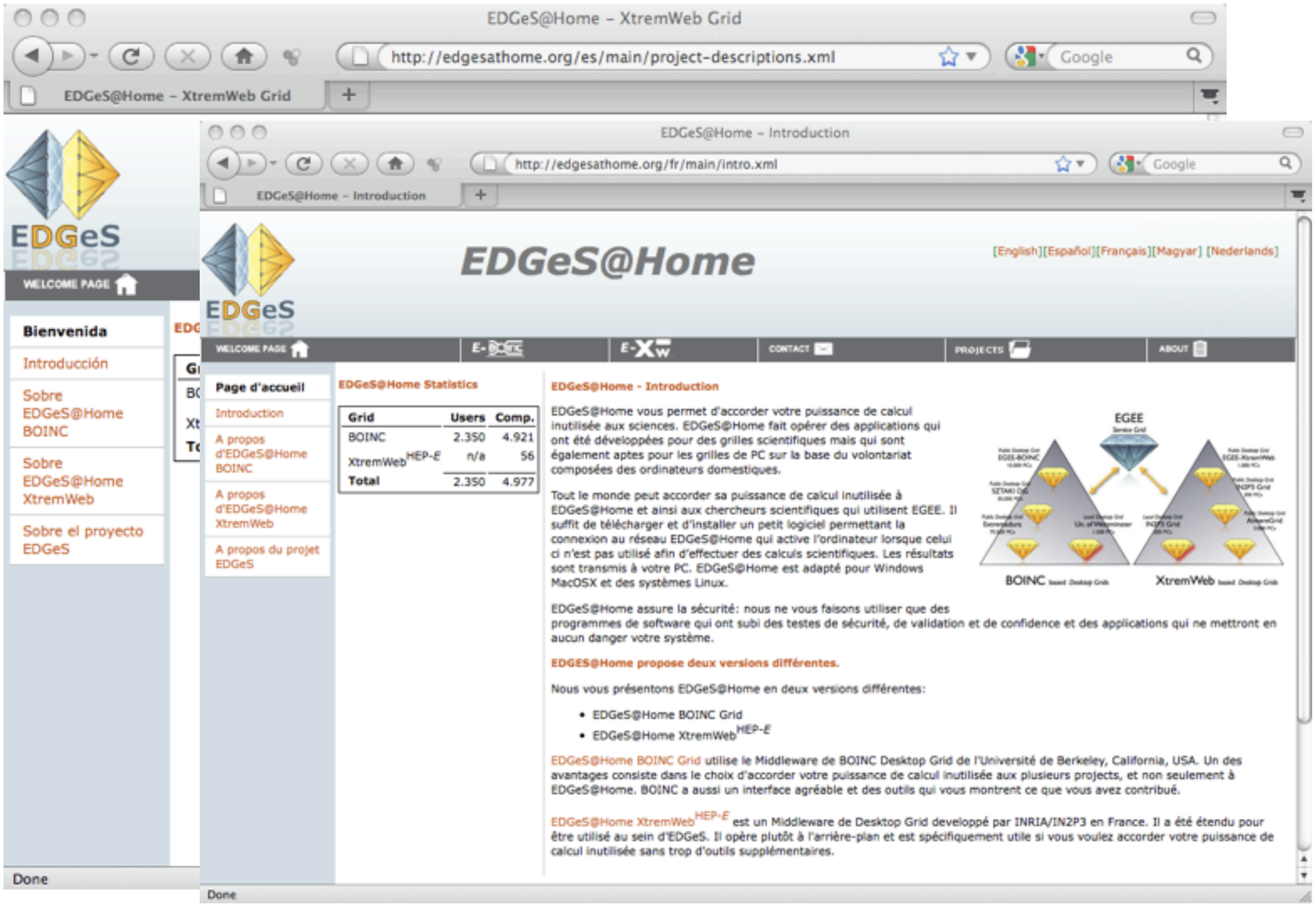

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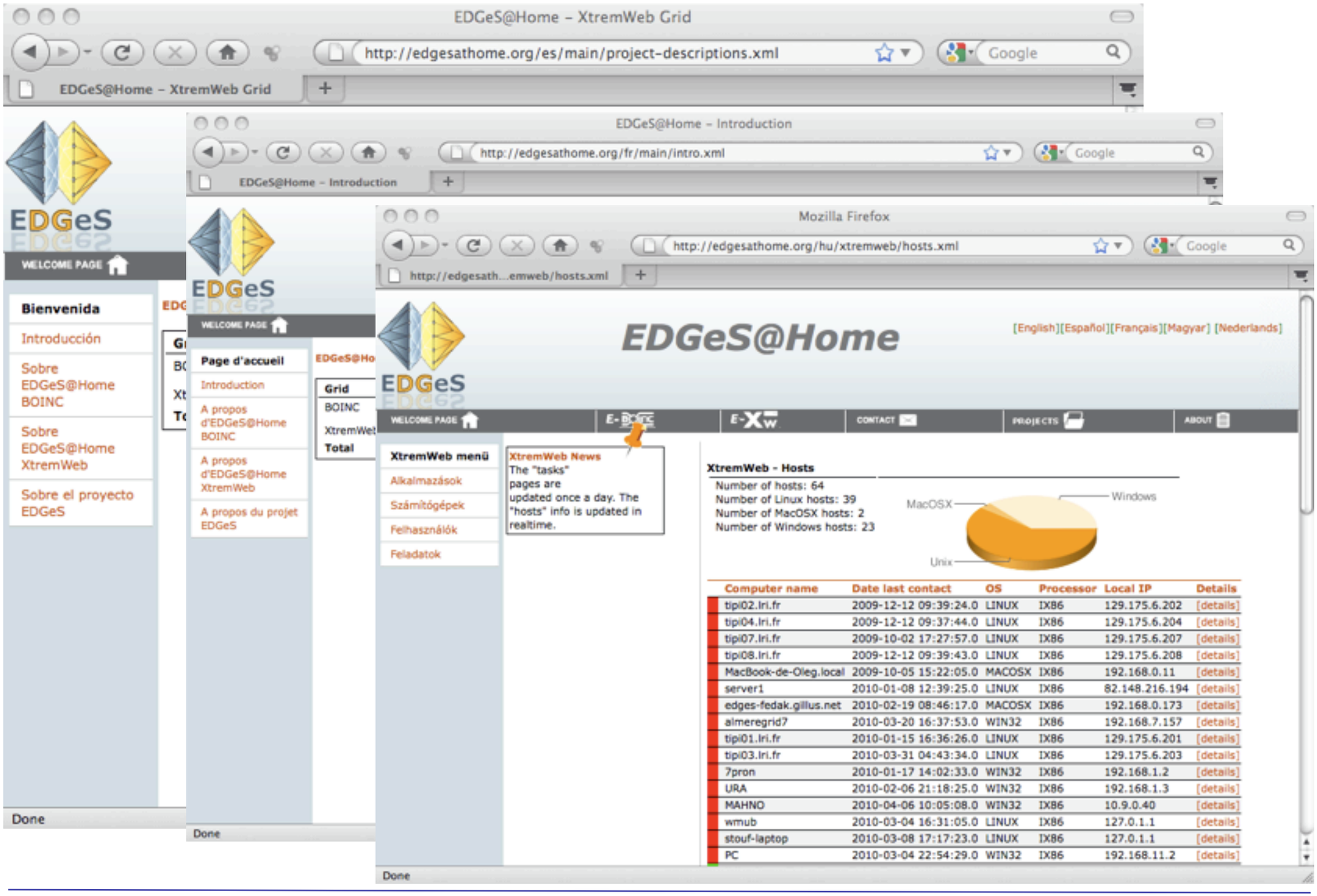


Joint Campaign
EDGeS@Home - Donate to Energy Research

- Good message
  - With EDGeS@Home you can help solve the world's energy crisis
  - Donate unused computing time to fusion research
  - Program ISDEP of Spanisch scientists
- Good initial coverage
  - Fusion communication departments
  - Press, radio
  - Available in local languages, local press releases
- But...
  - Not a large amount of production work
  - Technical problems with part of the Grid
  - New "test" applications blurred the message

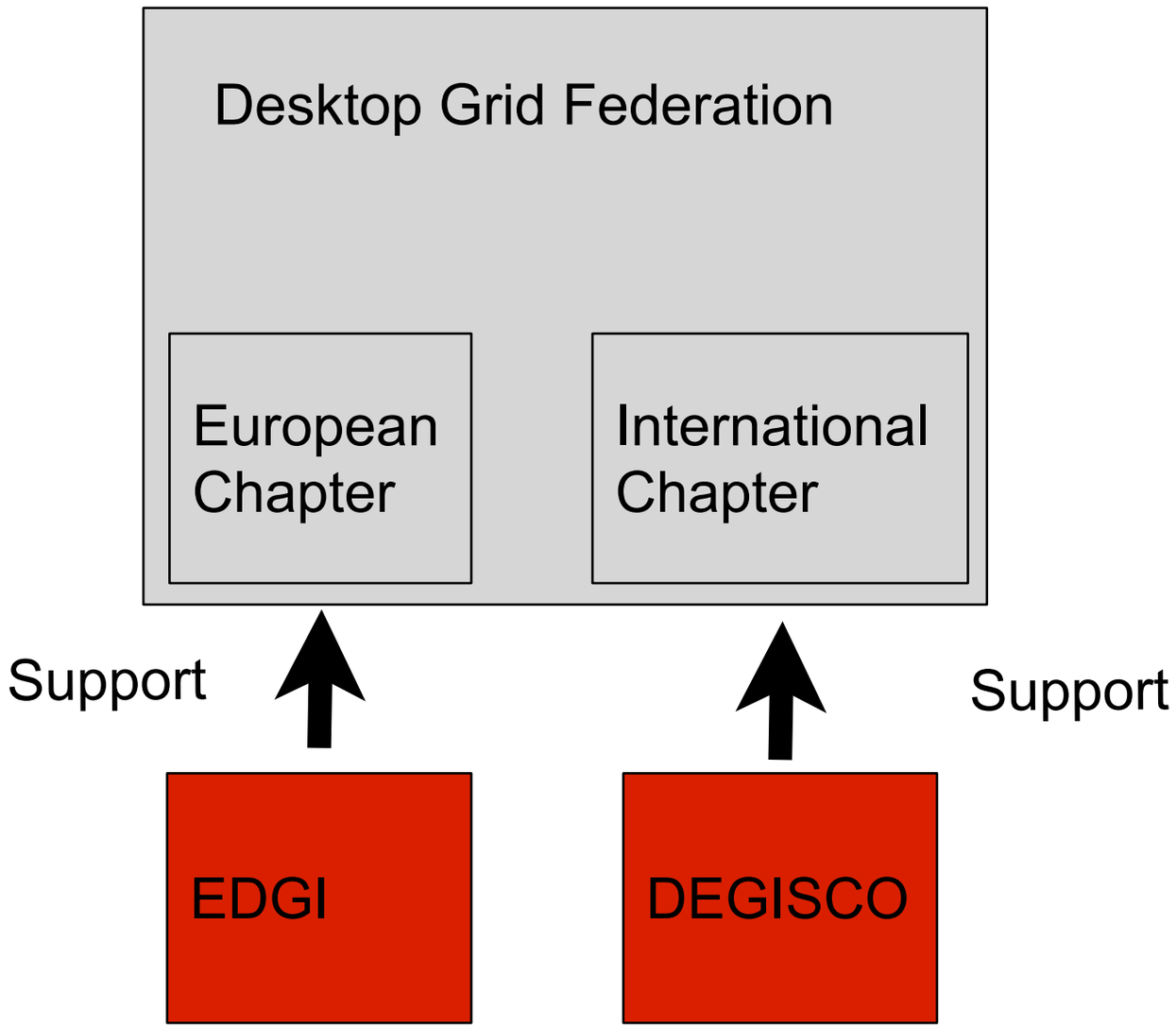
Educate, train, support

- *Support services:*
  - Expert support for Desktop Grid operators
  - Expert support for application developers
- Call for Operators and Developers (through EDGI) with financial support for 2 x 2 small projects.
  - Open later this month
  - Connected Cloud/Desktop Grid/Service Grid infrastructure
- *Meetings and event organisation:*
  - Tutorials on Desktop Grids and integration into the standard scientific e-Infrastructure (EGI,...)
  - About one each month already
  - Next one: September 17, Amsterdam, EGITF
  - And session in large Grid training school in Beijing September 8

Who pays for it?

- It is a member organisation, guess who...
- We are looking at member contributions and paid services
- But the good news: IDGF is supported by two European projects for the next two years: DEGISCO and EDGI
- The projects bring in a lot of experts, support, documentation, website support, etc.
- Valued at over € 1 million per year
- So let us not waste that money

Relation between entities



- Desktop Grid Federation entity independent of the projects
- Membership organisation
- Partners of DEGISCO and EDGI are members of the Federation (about 20 organisations)
- All activities of the Federation either “supported by EDGI” or “supported by DEGISCO” when appropriate and for reporting in the projects
- Work in progress: choose legal vehicle if any, develop bylaws, etc.

What is already there

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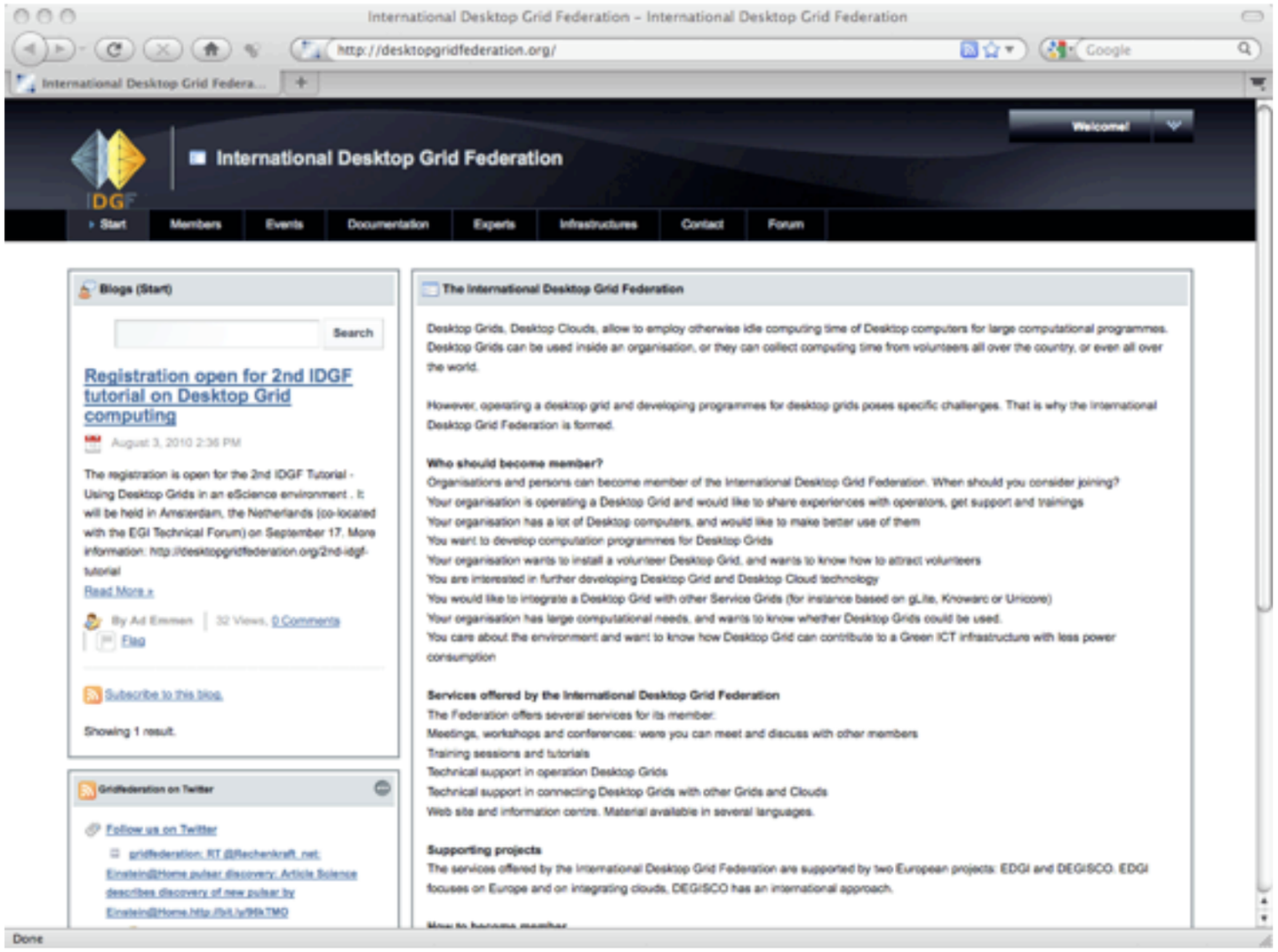

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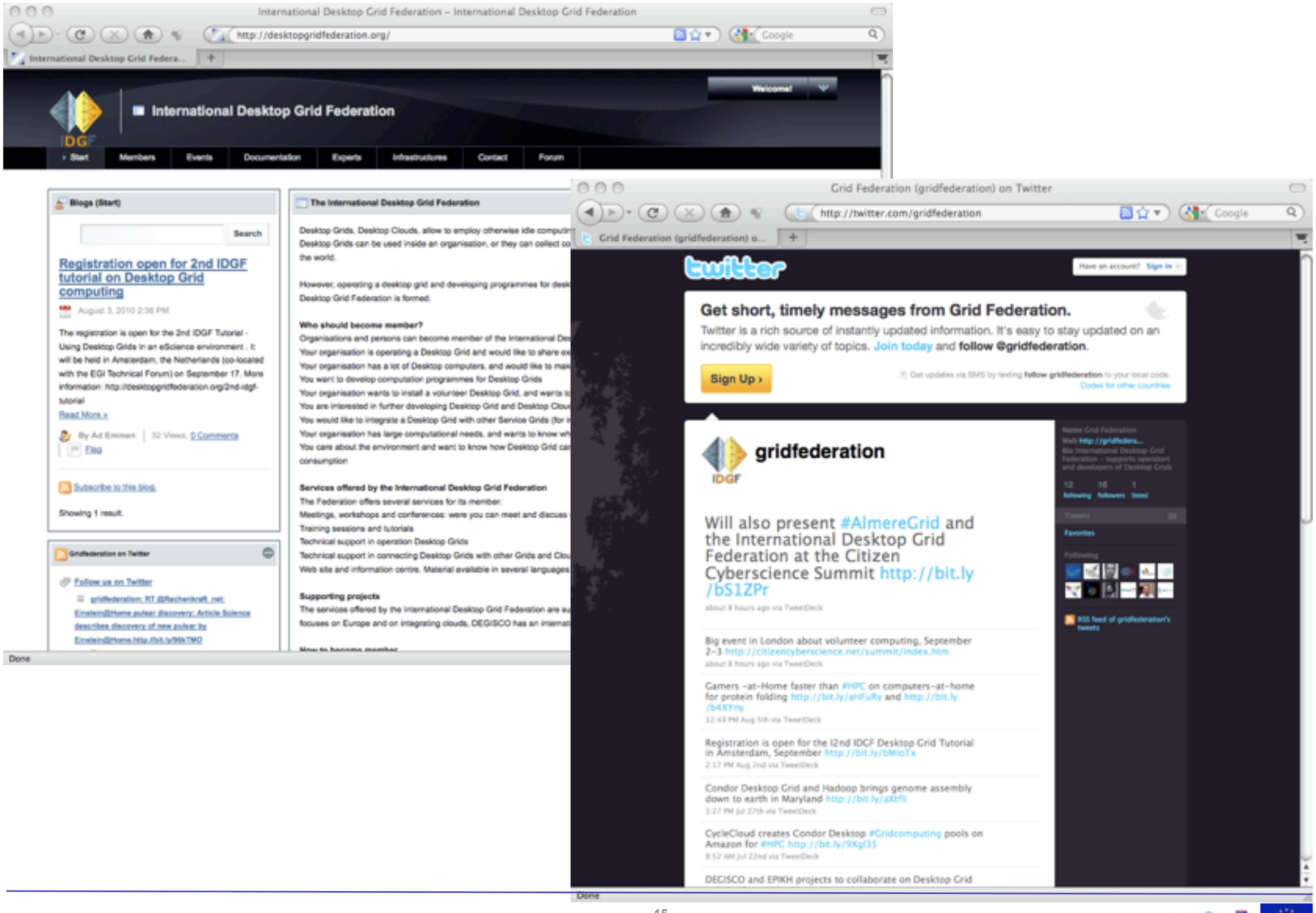

List of organisation and individual members

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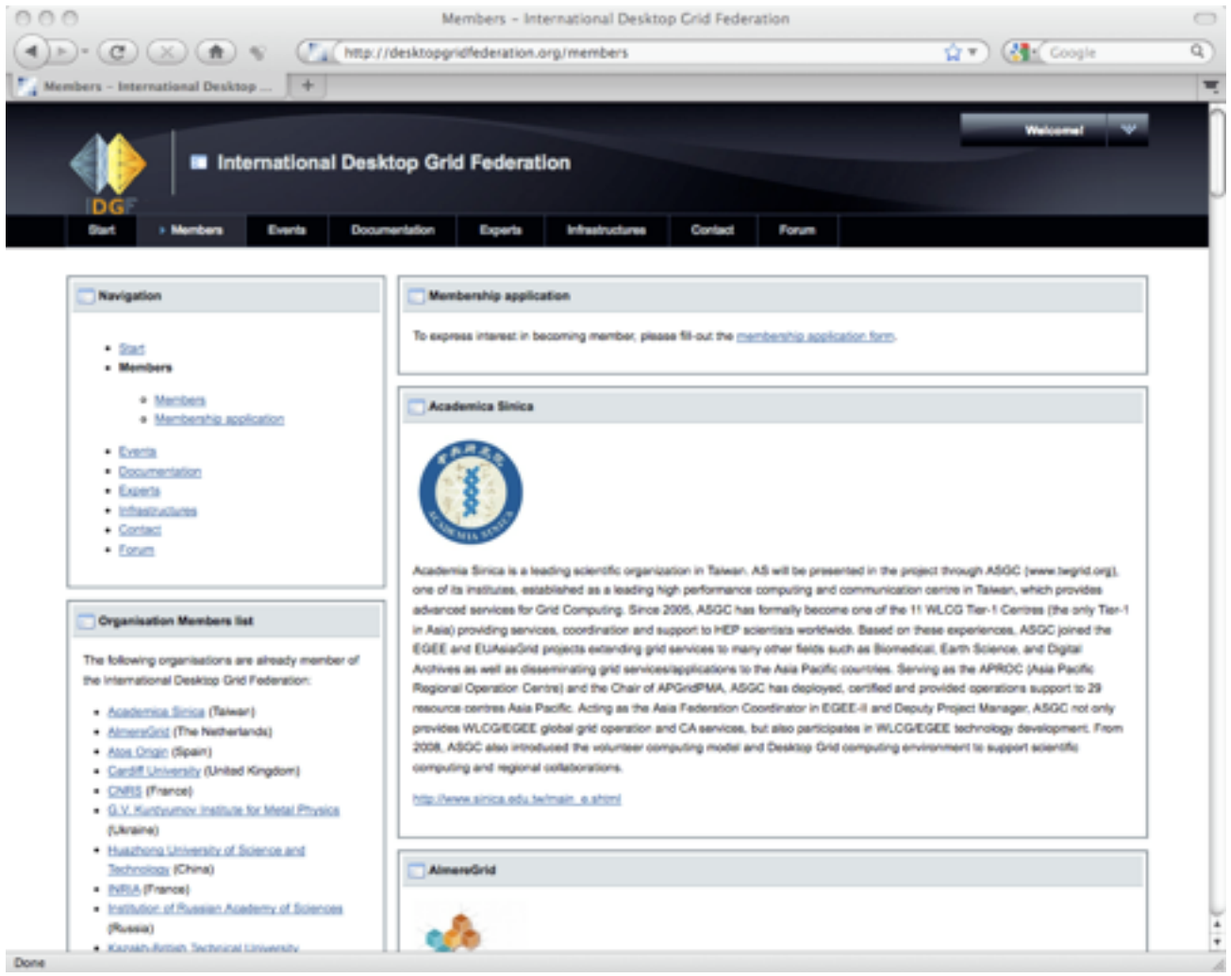

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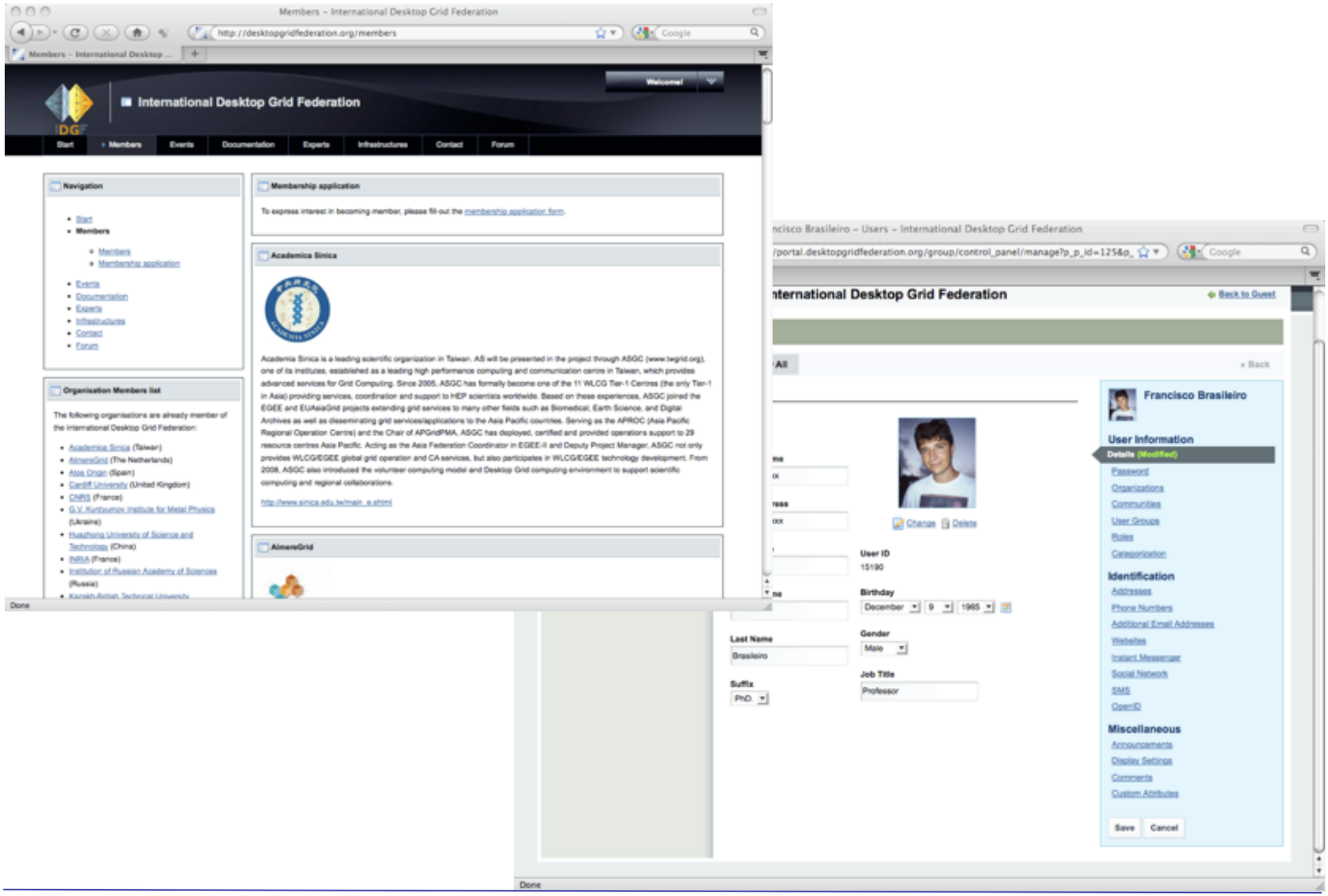

Events: tutorials, workshops

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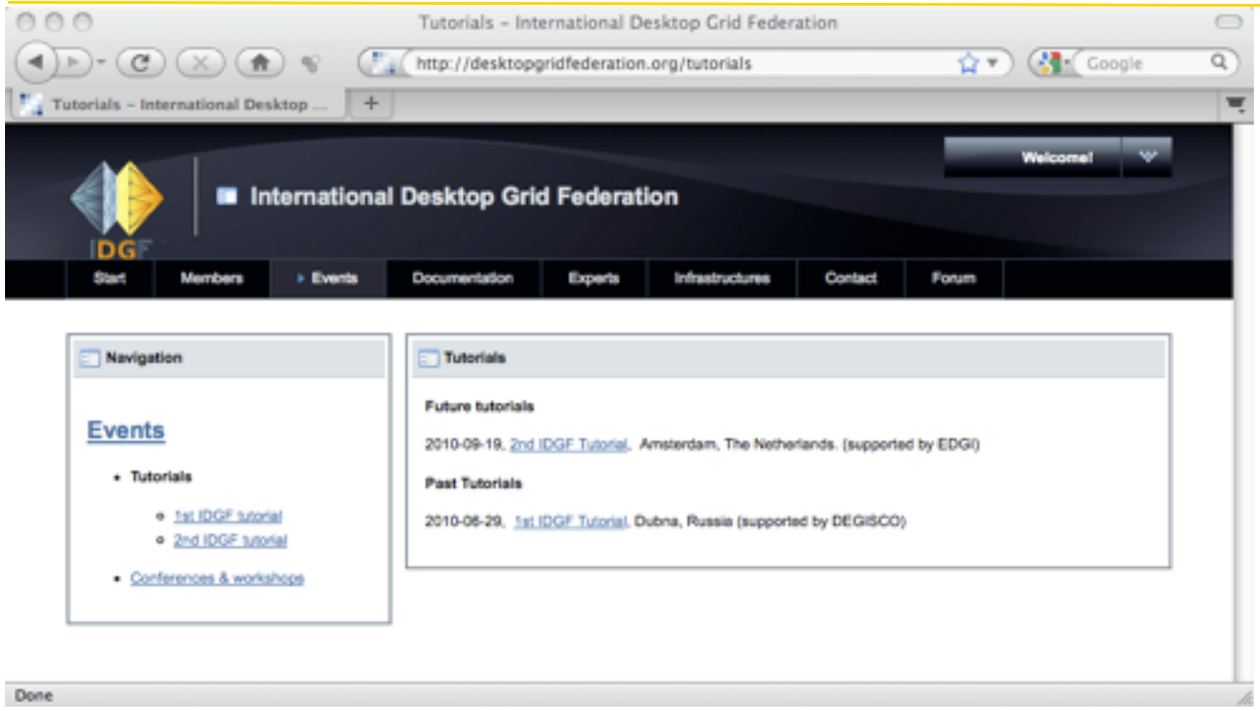

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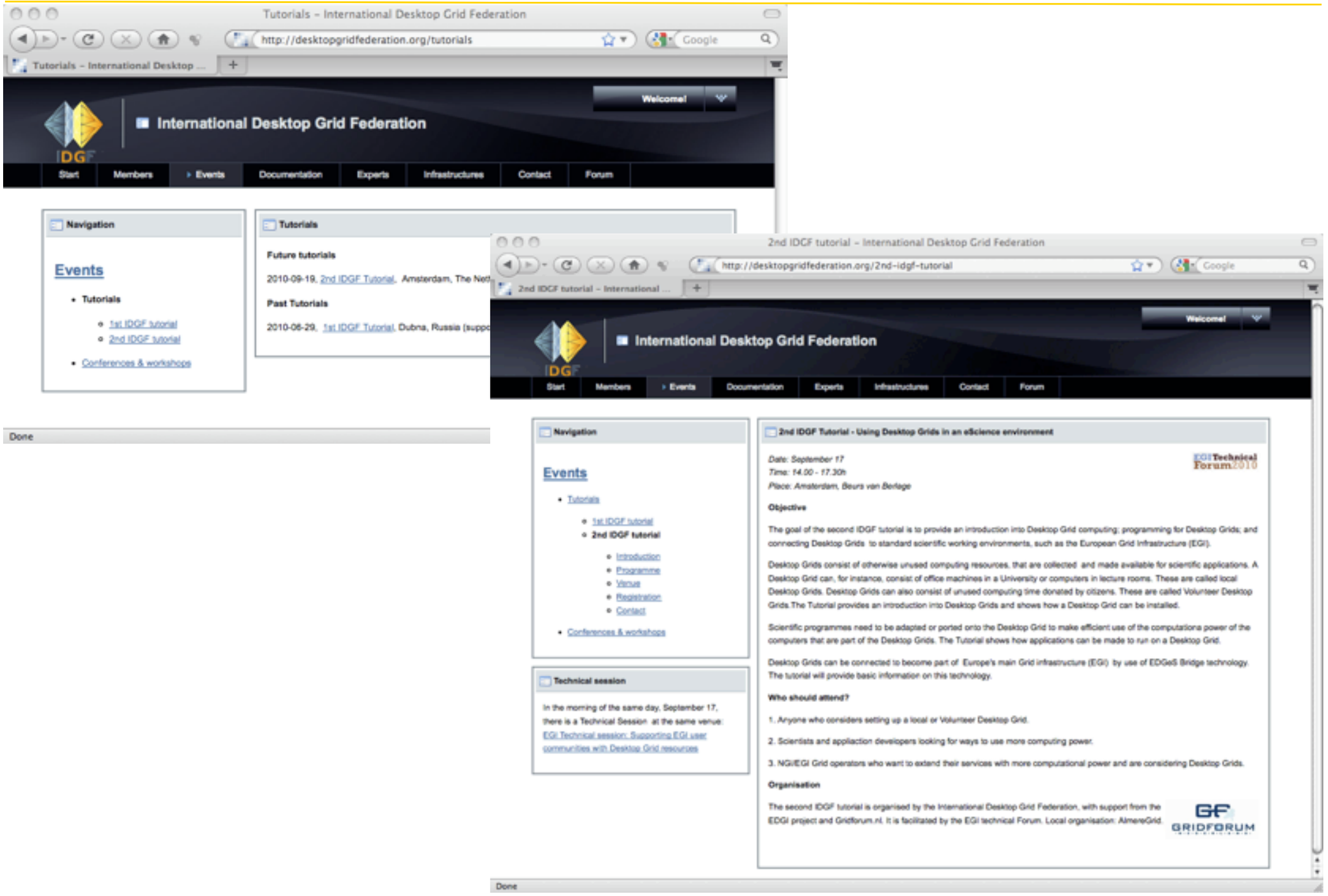

Green Desktop Grids

- Are Desktop Grids green?
  - In London they probably are
  - In Dubai they probably are not
- Airco takes a lot of energy
- Within IDGF (DEGSICO) we are systematically investigating the energy costs of Desktop Grids
- You can join the survey and discussion forum
- Results useful for any Desktop Grid

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What do *you* think

- Are you interested in joining?
- What should we focus on?
- Which pitt falls to avoid?

- Main question:
- *Will it help to substantially increase the number of volunteers and the number of local Grids at universities?*

http://desktopgridfederation.eu

Globe adapted from http://upload.wikimedia.org/wikipedia/commons/f/fa/Globe.svg

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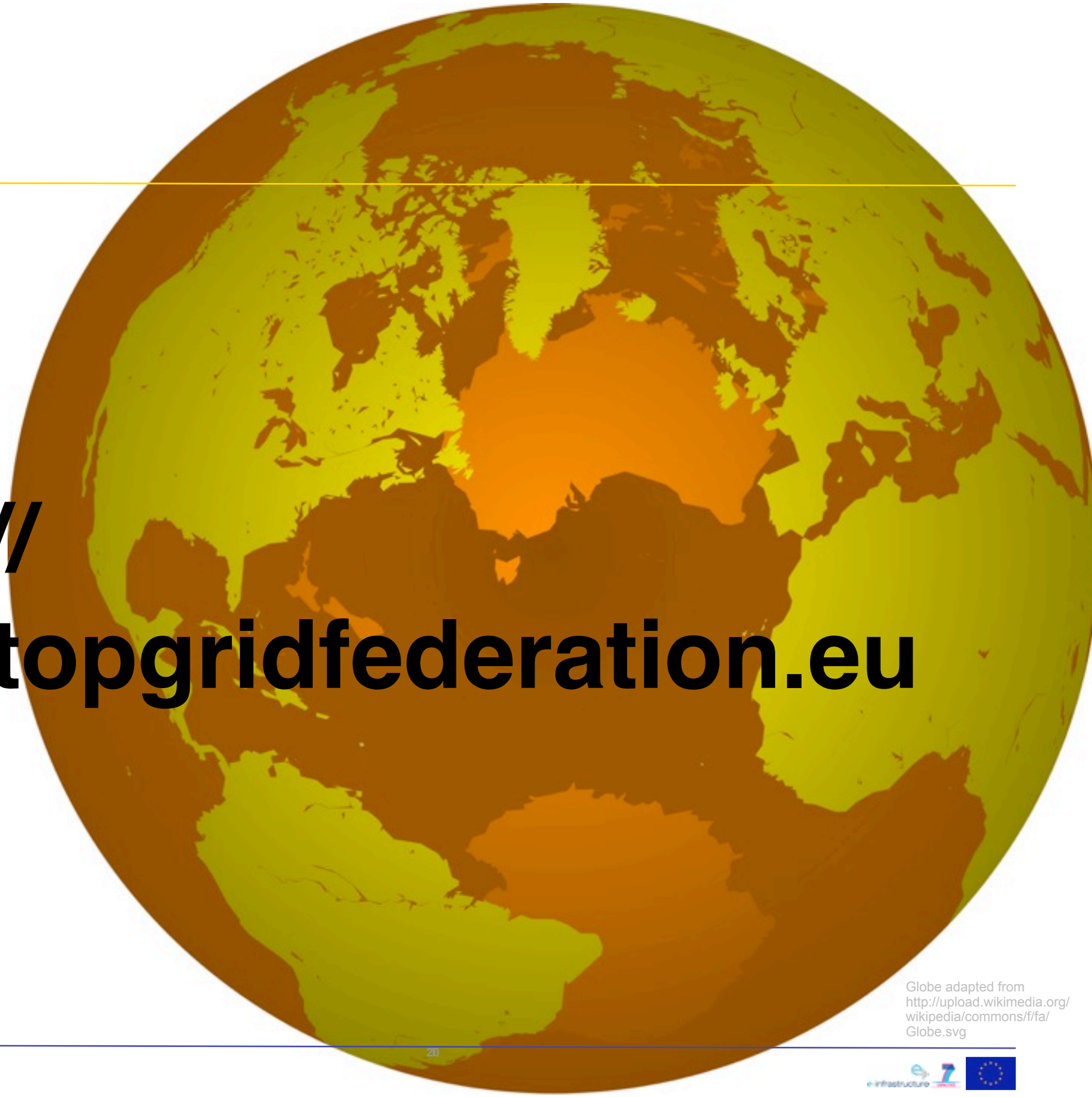

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