



# gUSE in EDGeS Project

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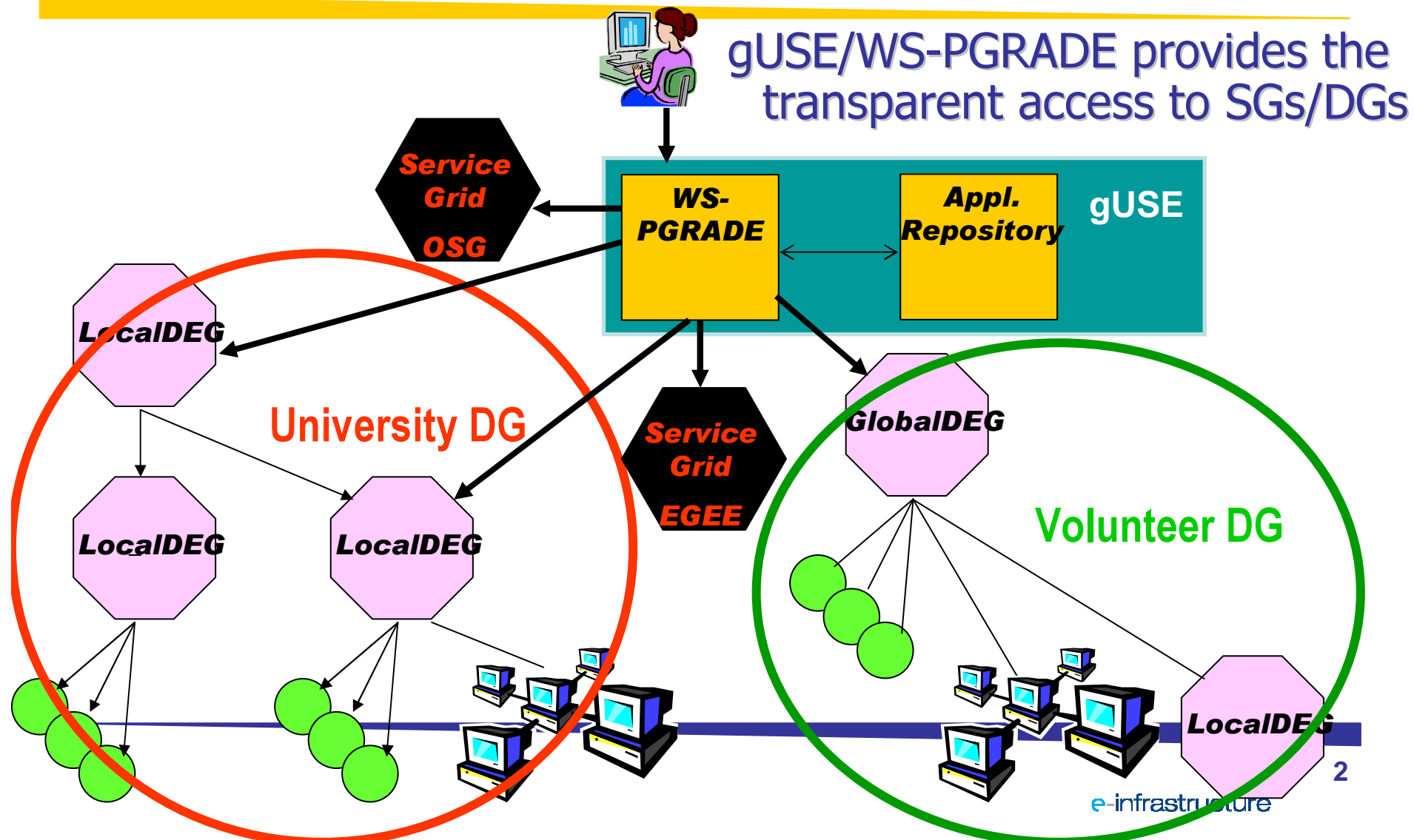


The EDGeS project receives Community research funding

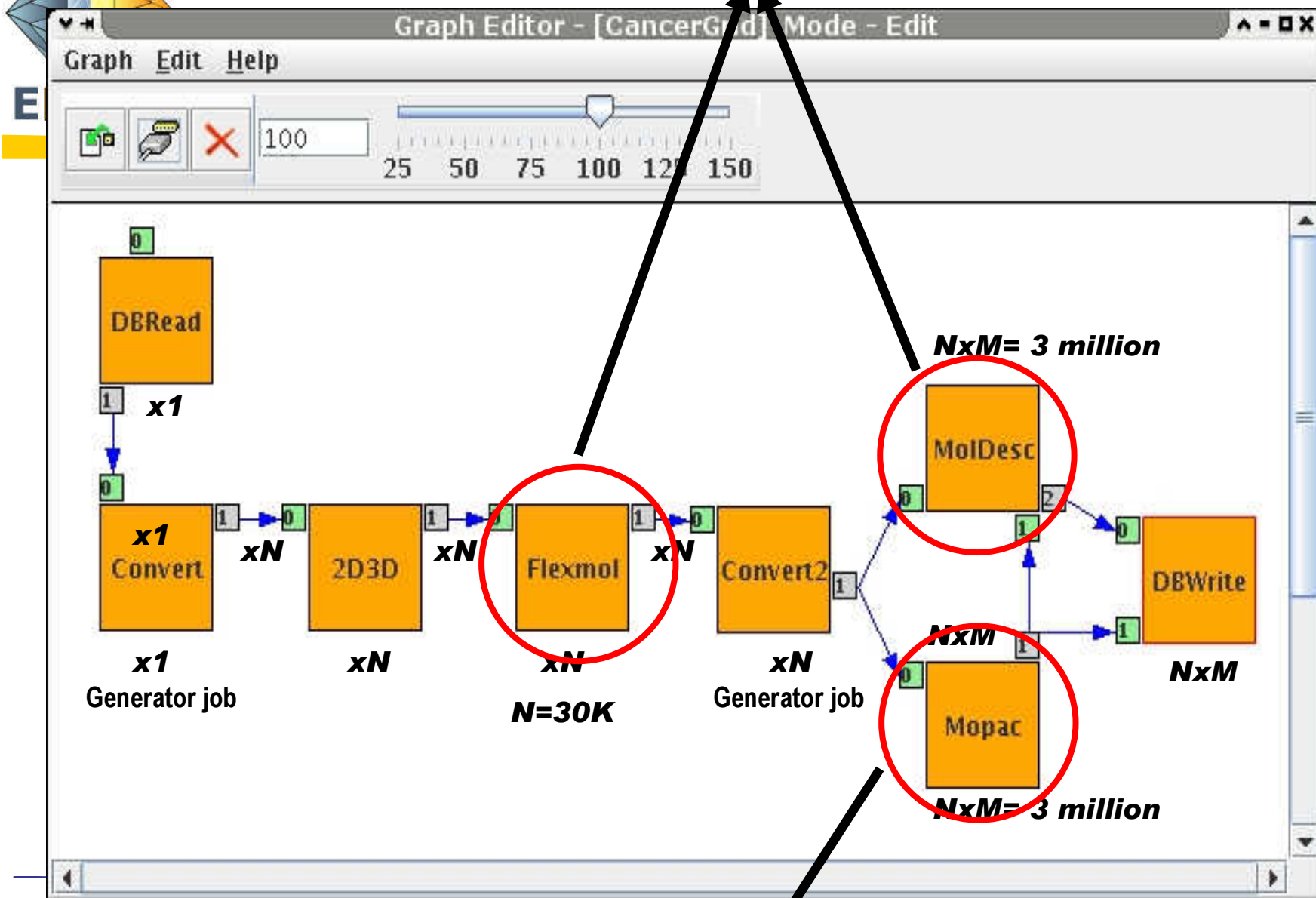




# WS-PGRADE access of the EDGeS infrastructure



# Execution in the private DG of CancerGrid project

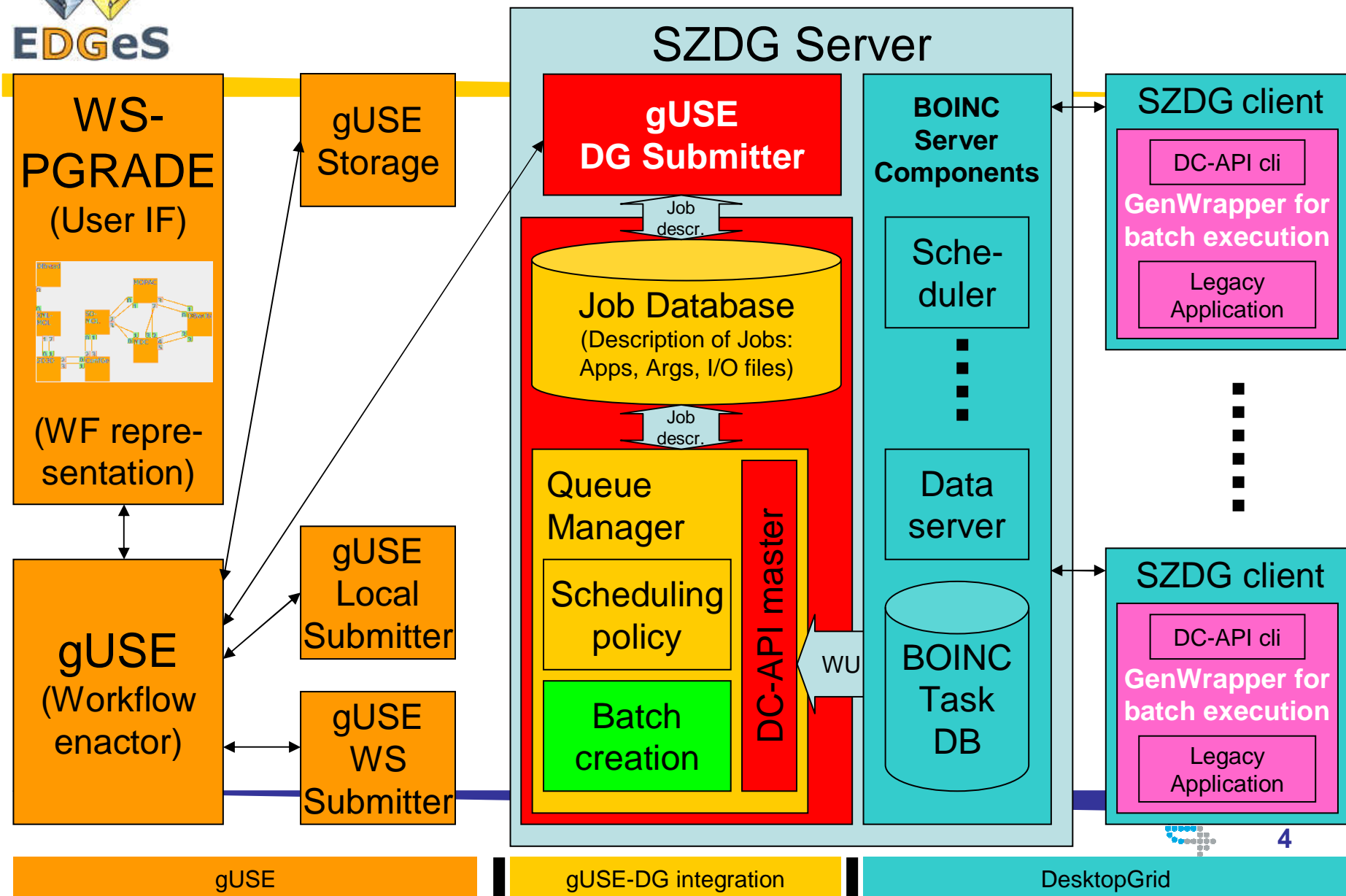


Execution in EDGeS VO of EGEE





# Connecting WS-PGRADE portal with DGs





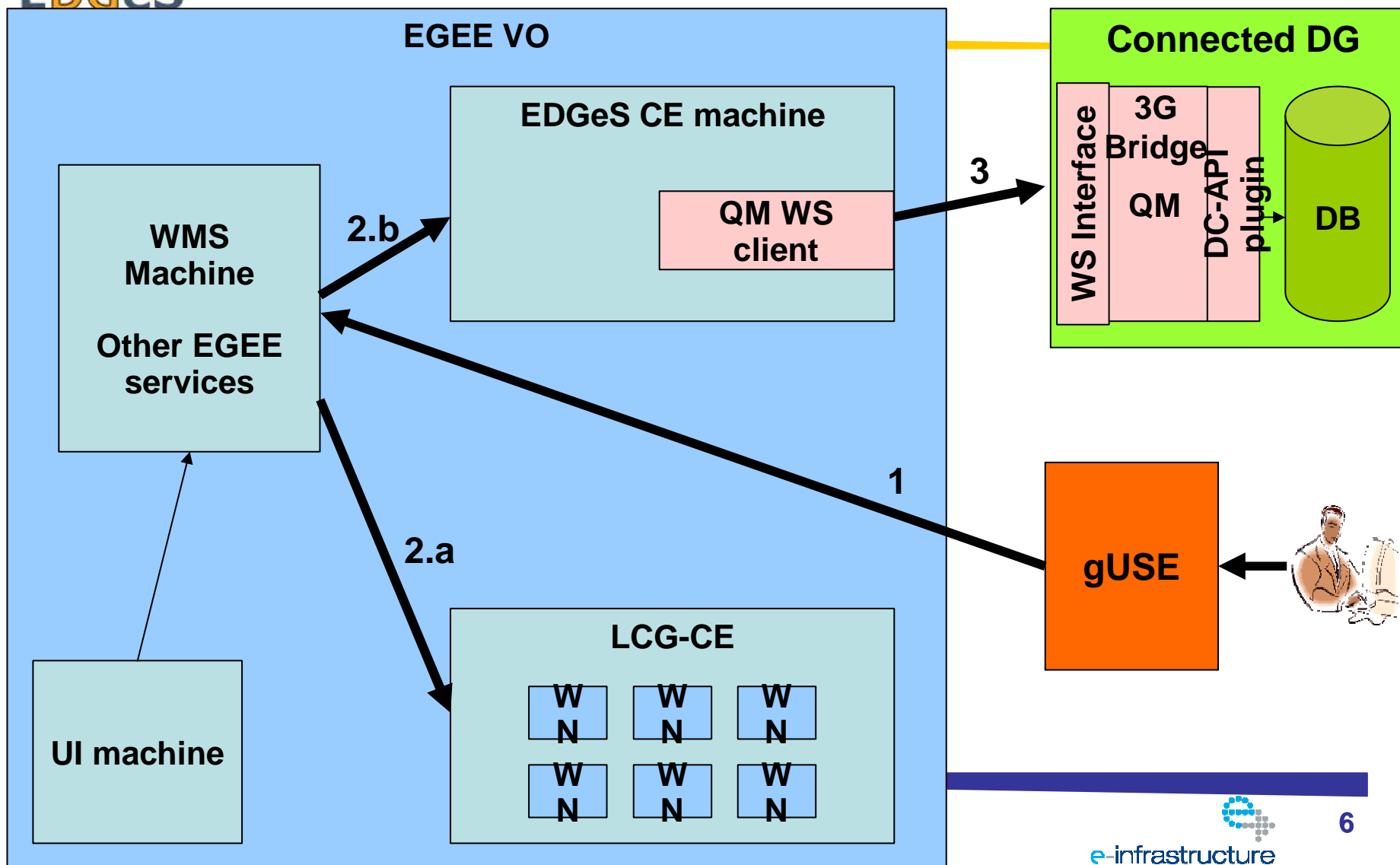
# Accessing EDGeS by gUSE

- Scenario 1
  - The same as in case of P-GRADE portal
  - Connecting gUSE to one or more EGEE VOs (e.g. EDGeS VO)
- Scenario 2
  - Connecting gUSE to one or more DGs
- Scenario 3
  - Connecting gUSE to one or more DGs and EGEE VOs



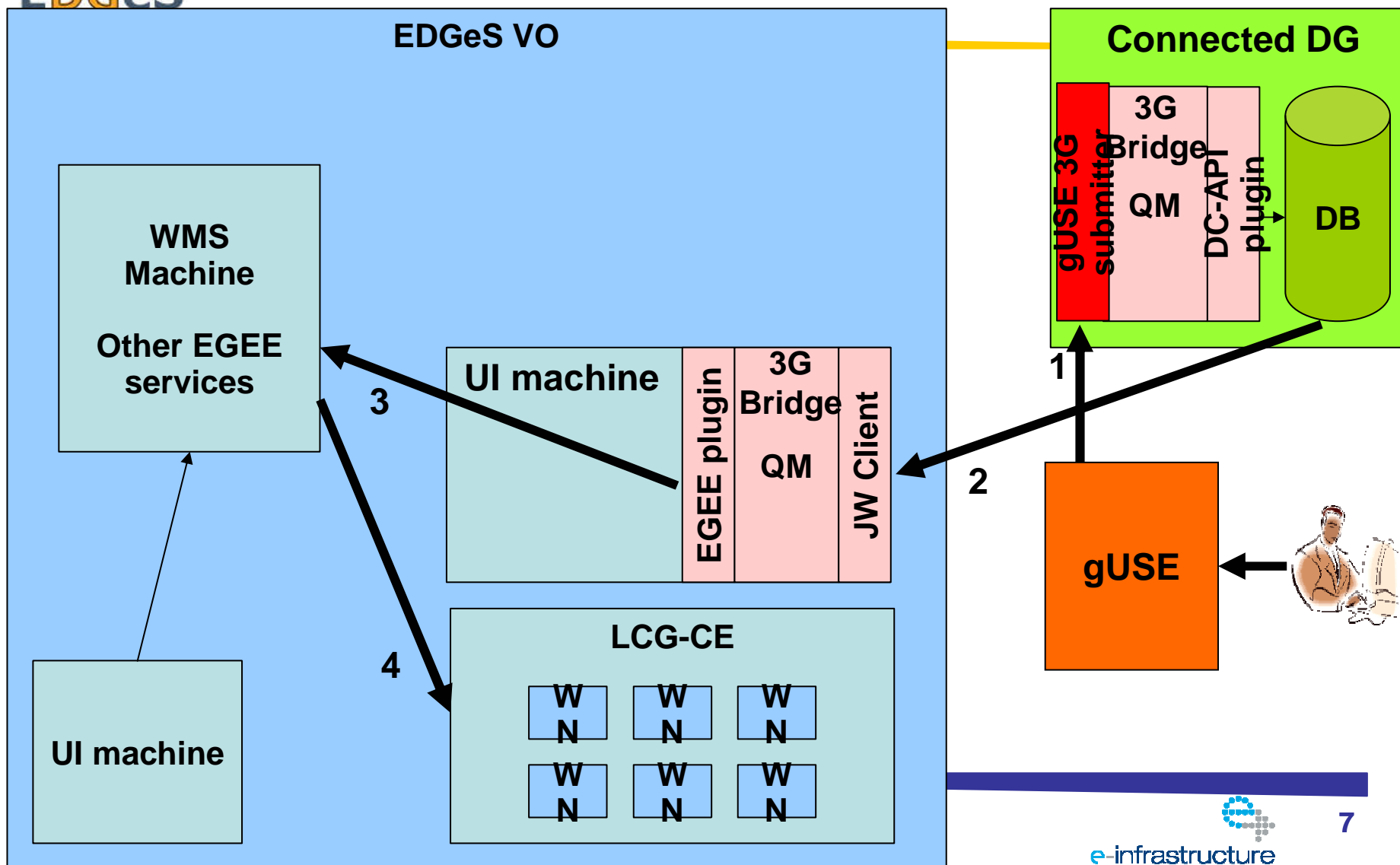
# Accessing EDGeS by gUSE

## Scenario 1





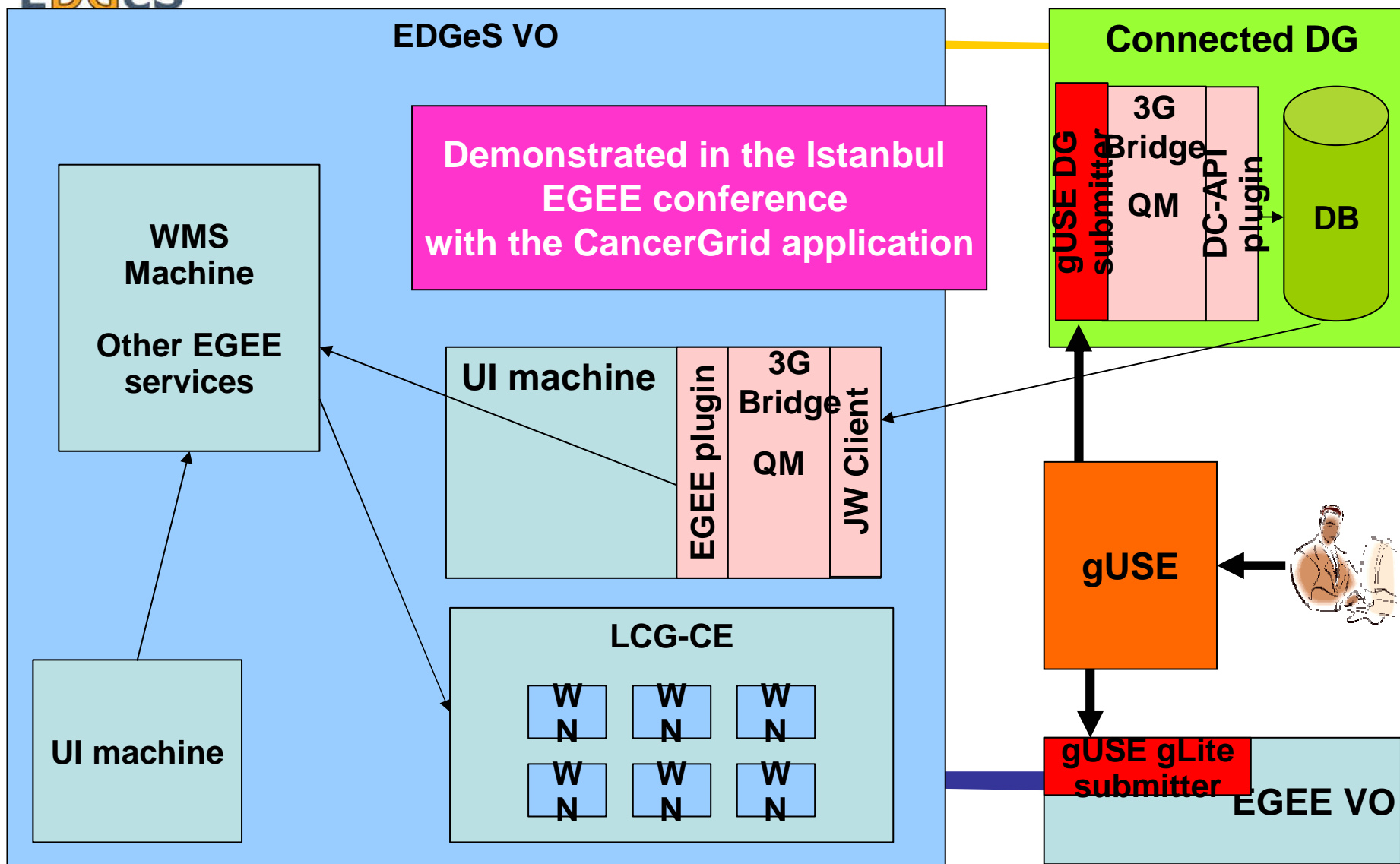
# Accessing EDGGeS by gUSE Scenario 2





# Accessing EDGeS by gUSE

## Scenario 3





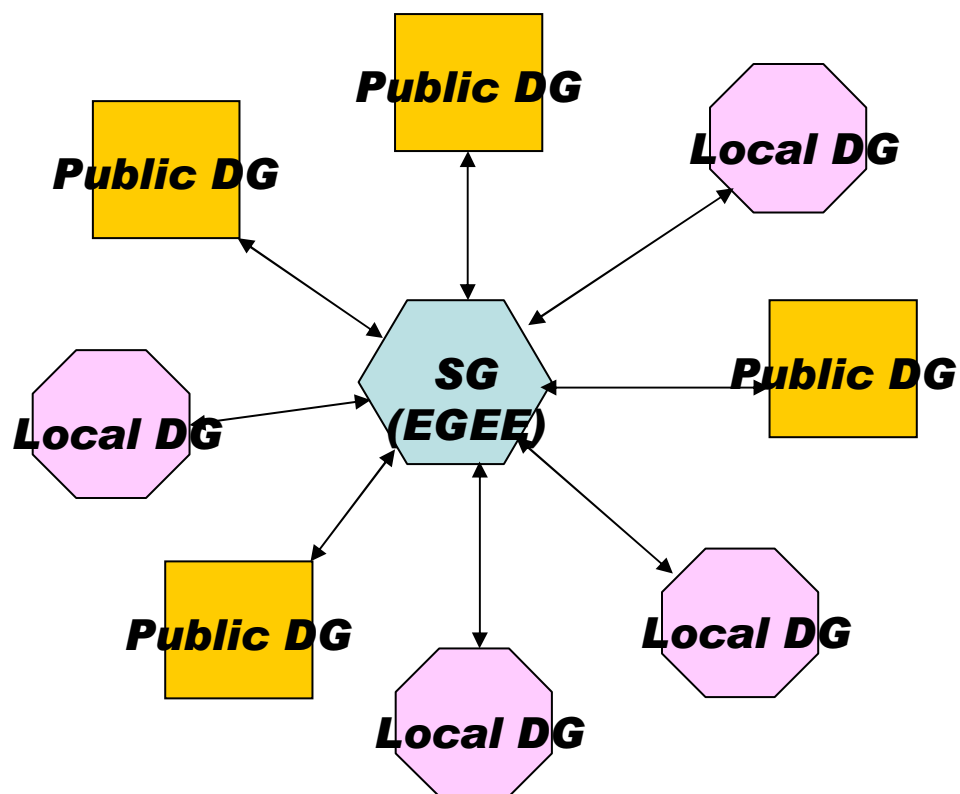


# EDGeS, gUSE and the World Wide Grid (WWG)

- The EDGeS and gUSE technology paves the way towards a **World Wide Grid**
- The concept of a WWG:
  - A **WWG would mean** that a grid user
    - could access not only a single grid
    - rather as many grids as many needed according to his actual needs
  - Why to simultaneously access many grids?
    - **To exploit large-scale parallelism in the grid (WWG could be a competitor of supercomputers)**
    - Parameter sweep (PS) applications require much more resources than existing individual grids can offer (see EGEE data challenge applications)



# 1<sup>st</sup> step towards a WWG

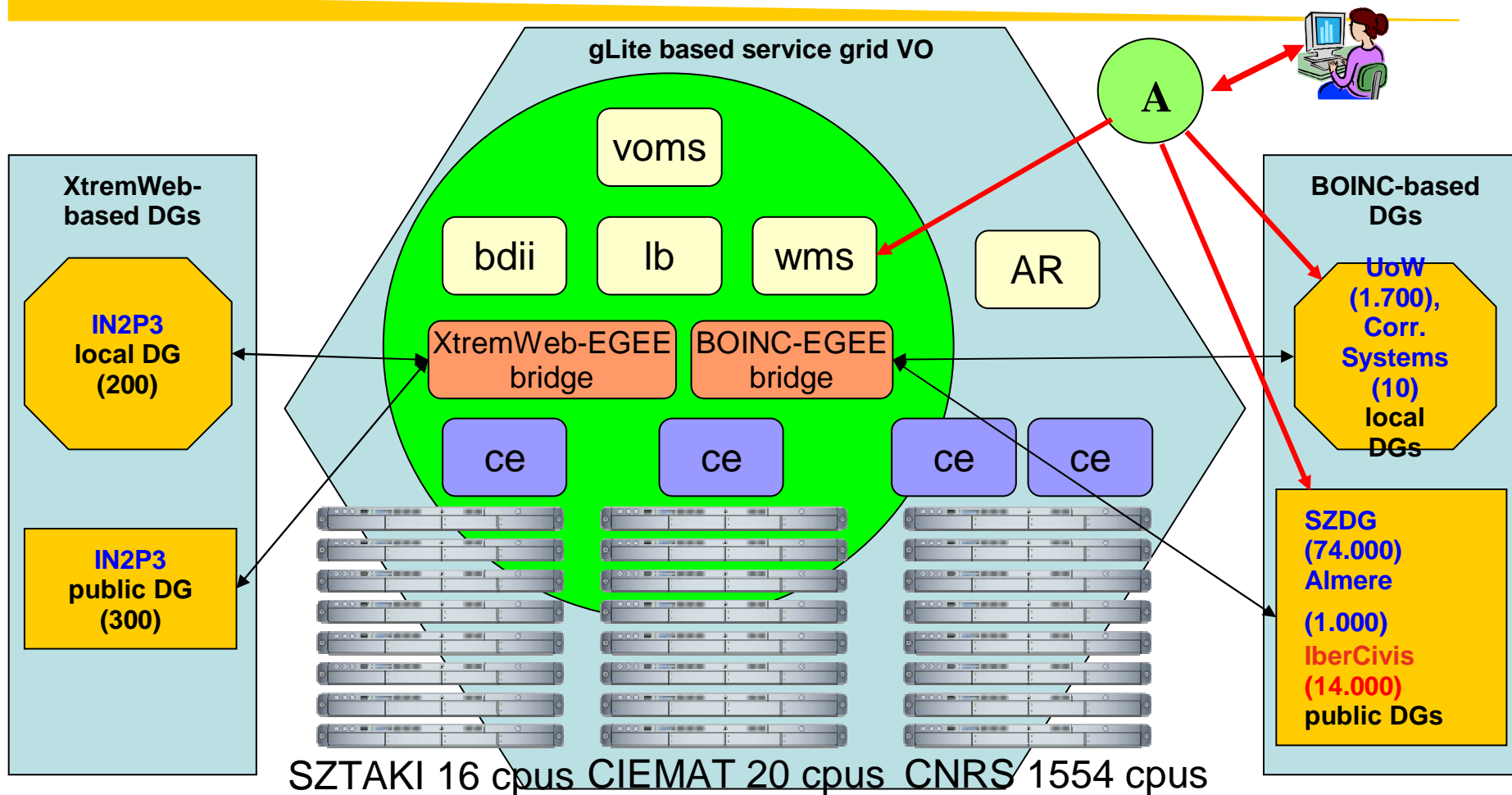


## EDGeS

connects the largest SG with many public and local DGs

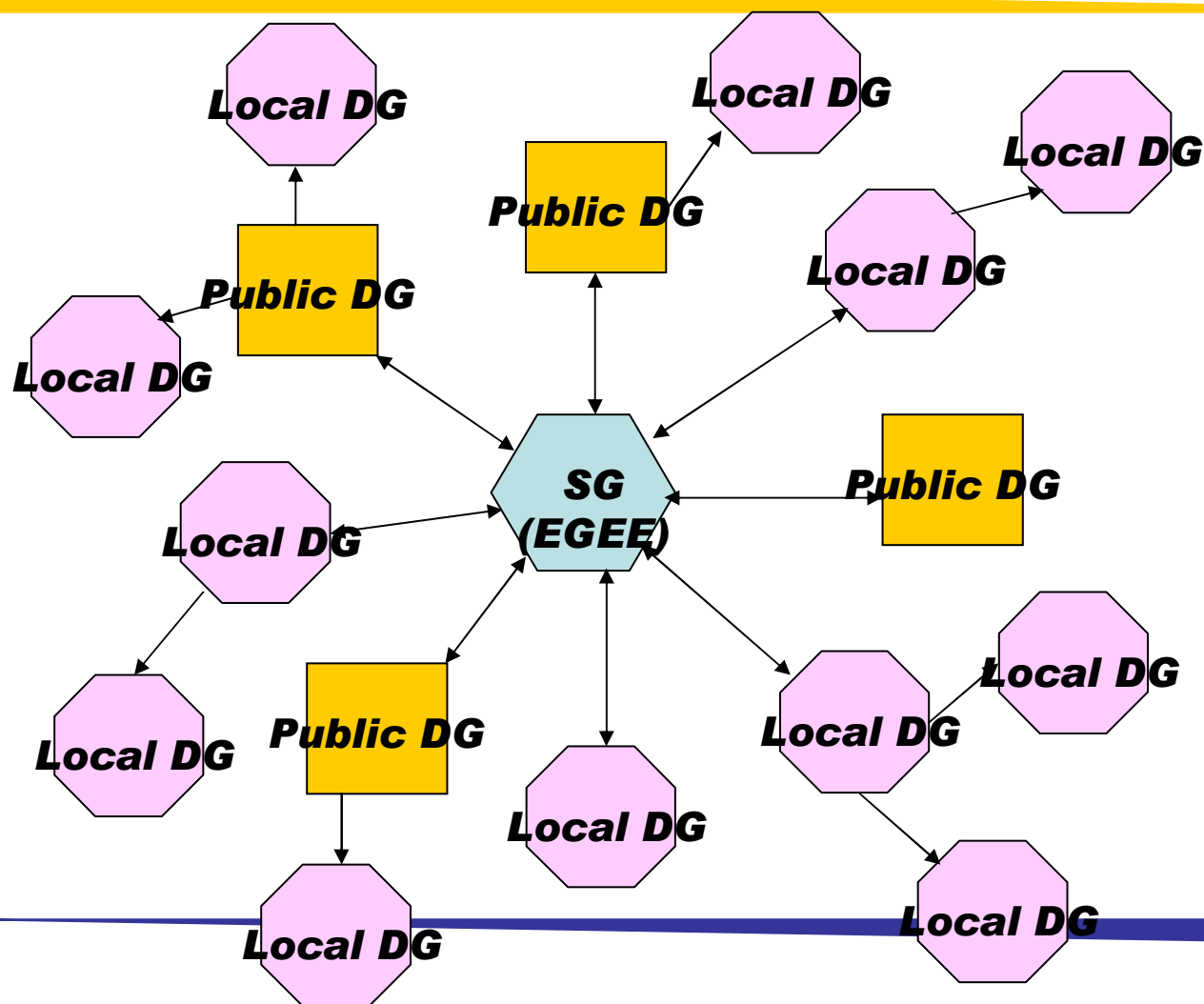


# Towards the WWG: Production EDGeS Infrastructure





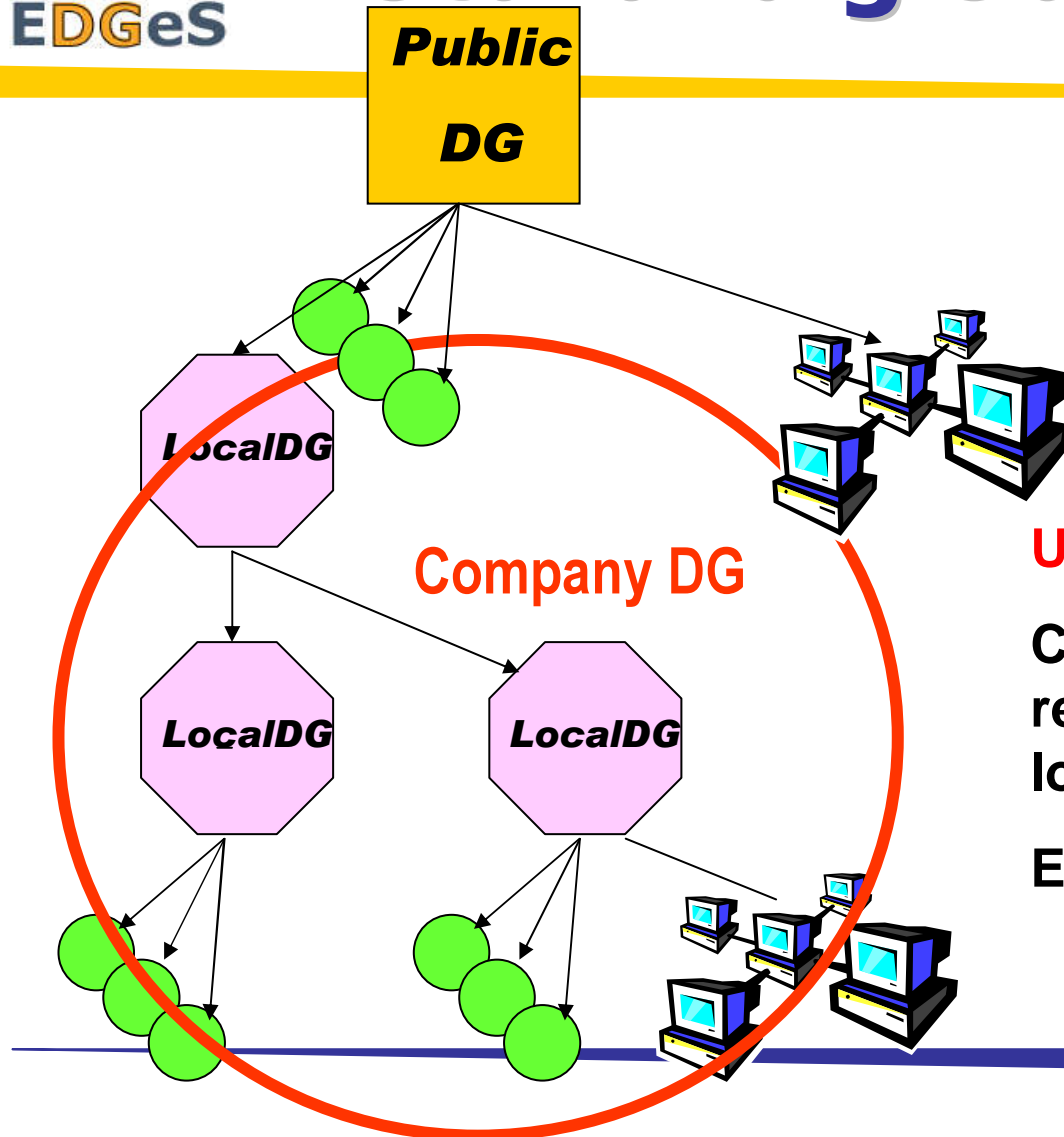
# 2<sup>nd</sup> step towards a WWG



Connect local DGs into the WWG using the DG hierarchy approach



# Integrating local and global DG systems



A local DG can offer resources to a global DG

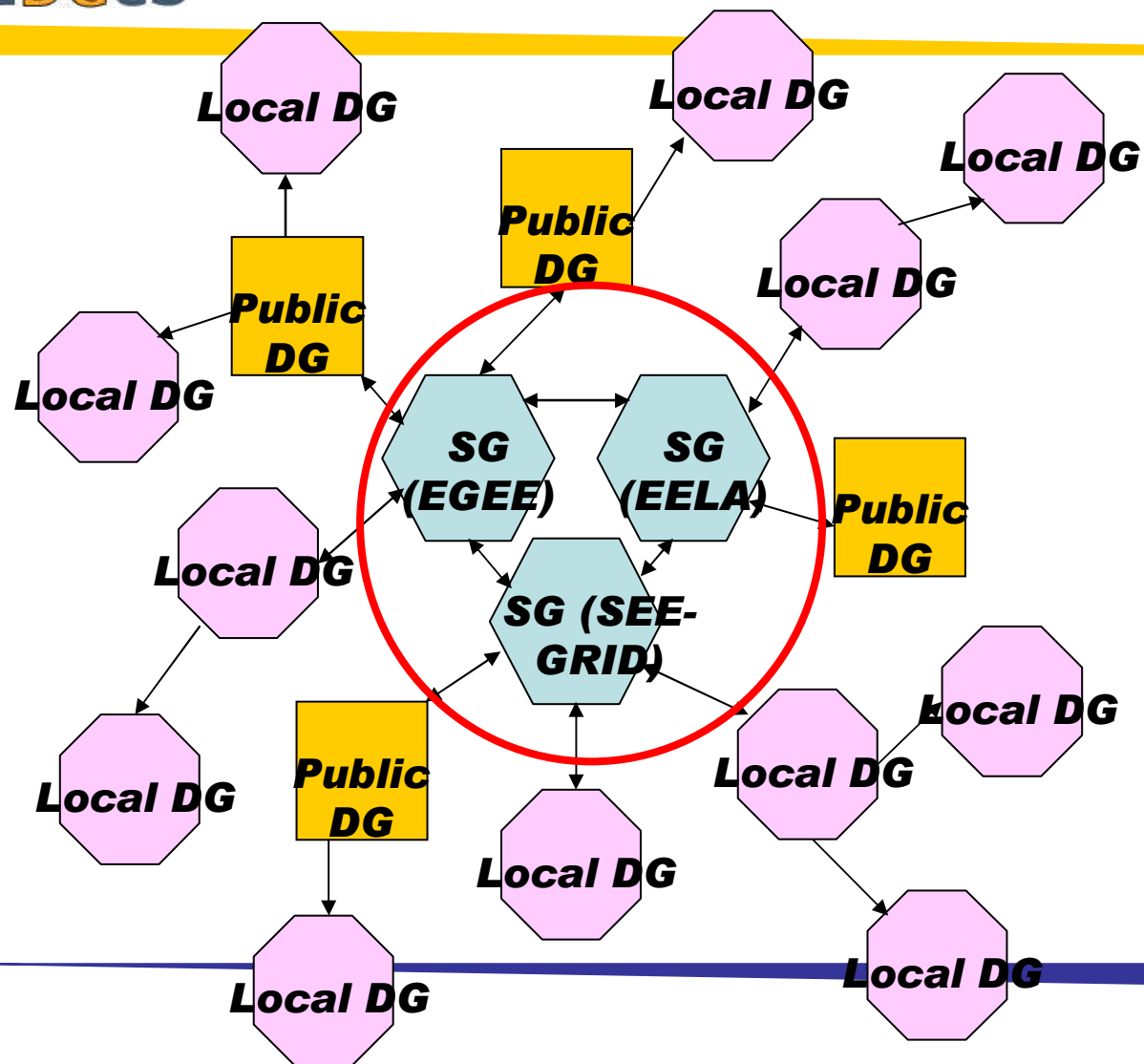
## Usage scenario:

Companies can offer their resource to a public DG via a local DG server

E.g. **IBM World Community Grid**



# 3<sup>rd</sup> step towards a WWG



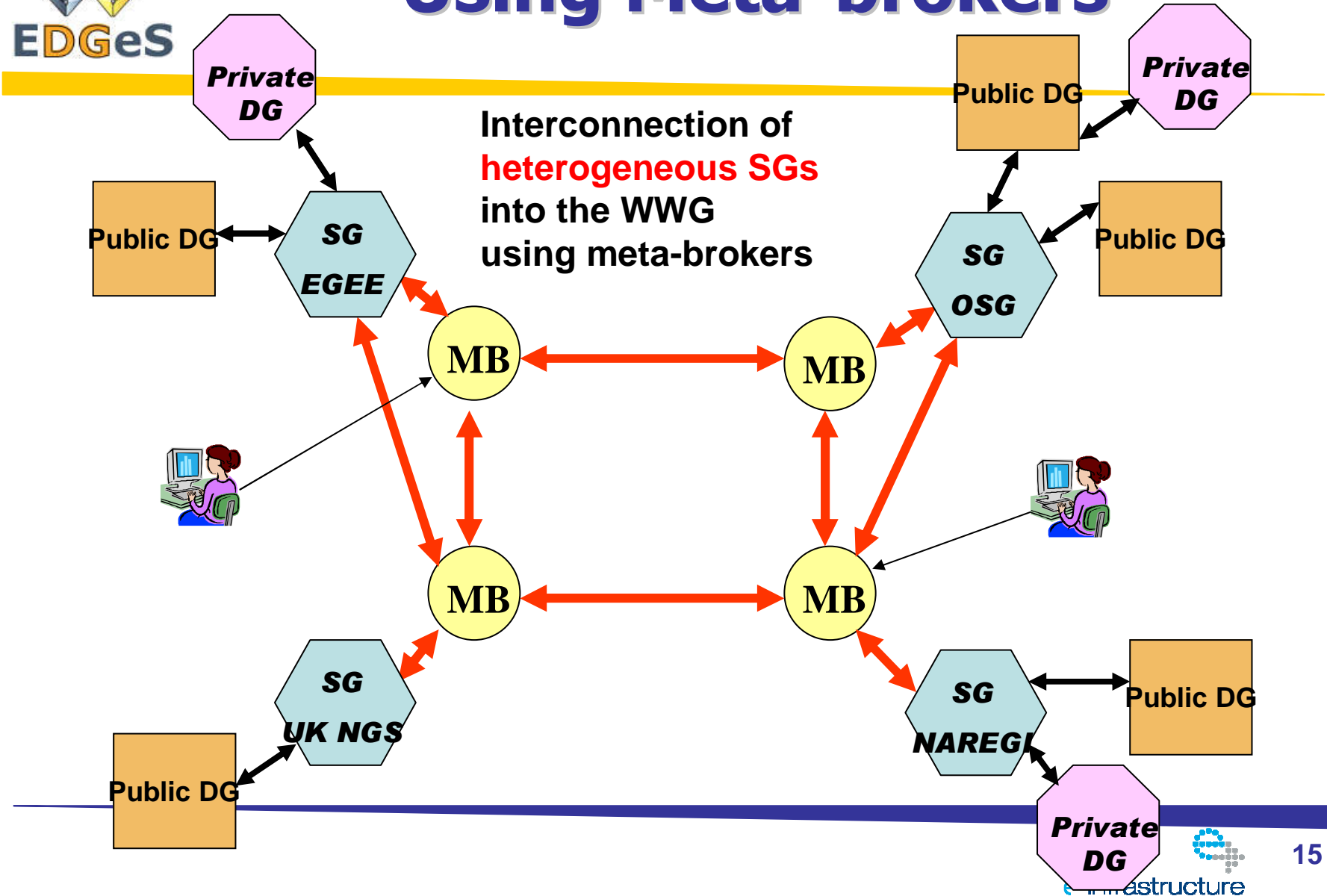
Interconnection of homogeneous SGs

gLite based SGs are connected into the WWG

MoU with SEE-GRID and EELA

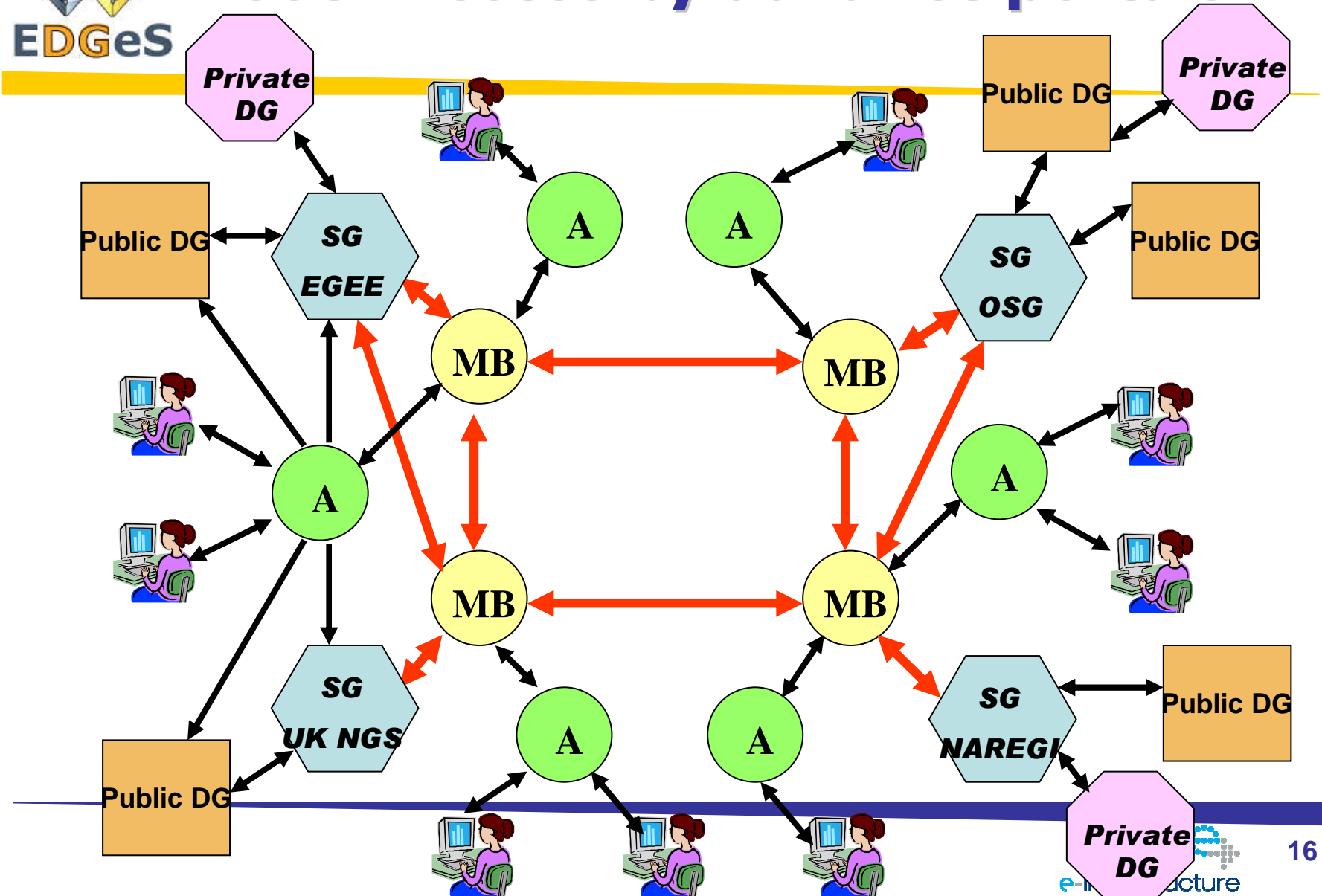


# 4<sup>th</sup> step towards a WWG: Using Meta-brokers





# 5<sup>th</sup> step towards a WWG: User Access by advance portals







# Summary

- gUSE provides flexible, high-level access to the EDGeS infrastructure
- gUSE and EDGeS together open the way for a world wide grid infrastructure where users can get resources according to their need
- This idea can integrate Cloud Computing and Grid Computing ideas in the future