

a Grid certificate in 5 minutes

large scale federated automated issuing of
grid certificates

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EGEE'09

21-25 Sept 2009

Barcelona

me



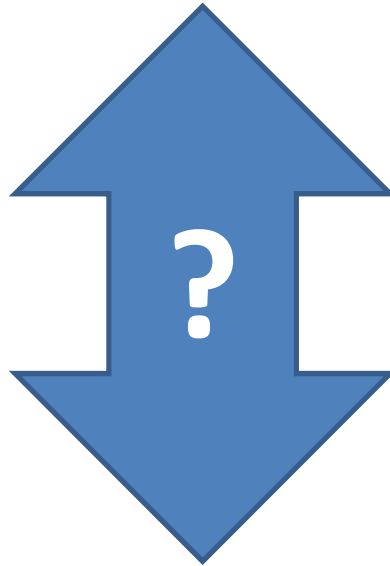
- **1998-2007: SURFnet**
 - CERT, security, PKI, systems engineering, e-voting
- **2007-now: UNINETT**
 - service development, storage, PKI

collaborative service

the true story of developing a sustainable
scalable pan-European service

Problem 1

Norwegian Grid, HPC, Data Storage



Norwegian authentication infrastructure (AAI)

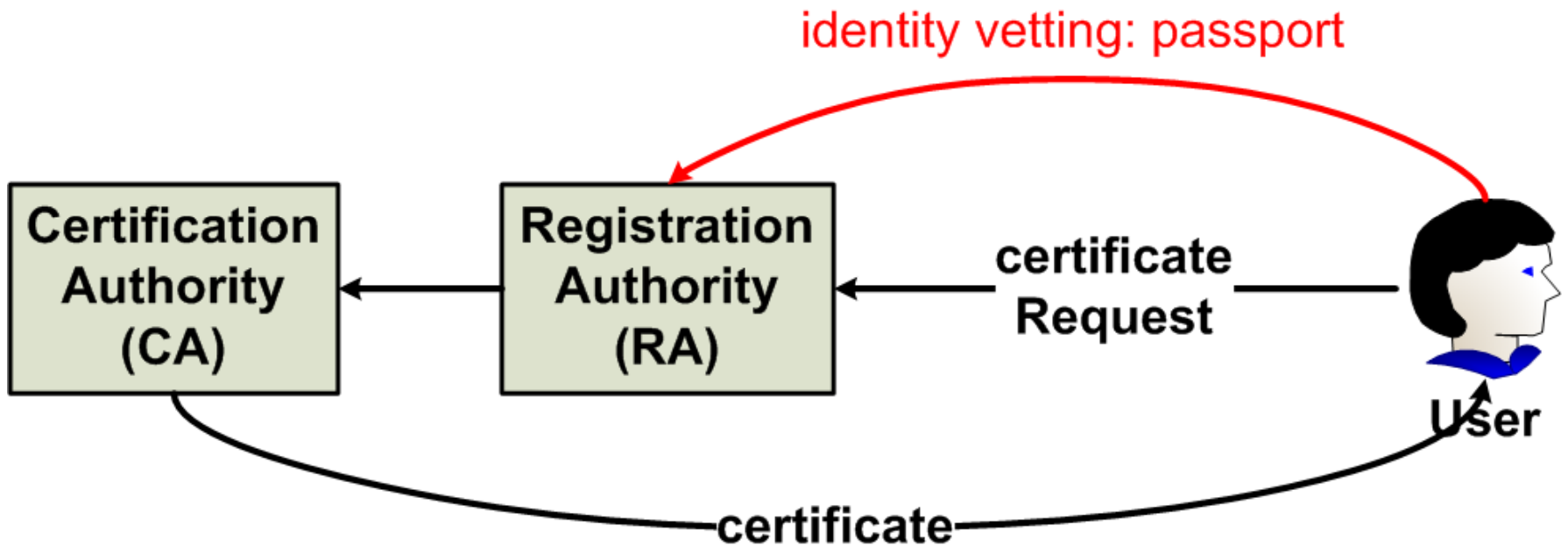
Problem 2

eScience Gridauthentication

=

x.509 certificates

Traditional certificate issuing



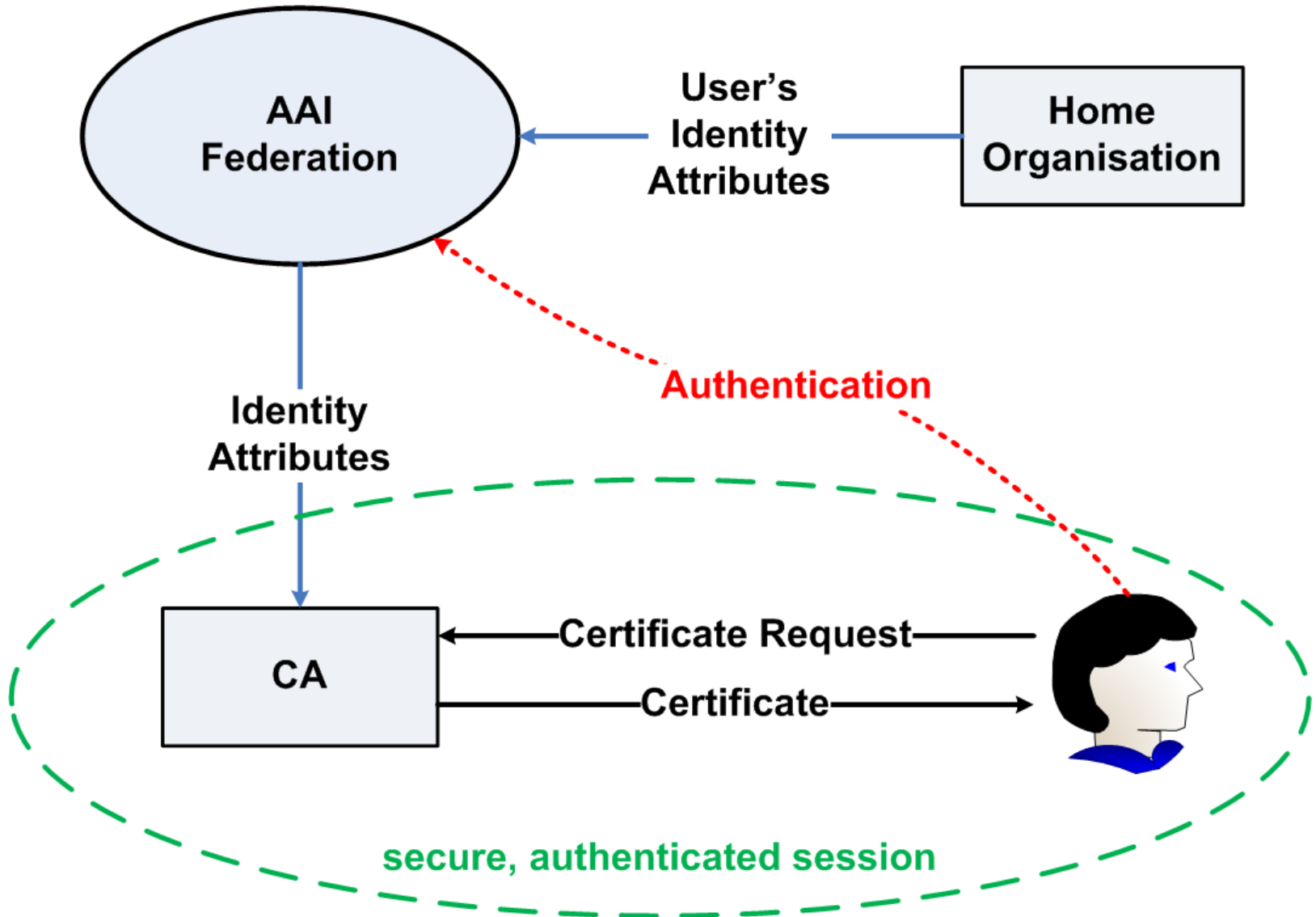
Manual identity vetting

annoying for the user

annoying for the service provider

your identity has been vetted!

Solution: reuse and automate

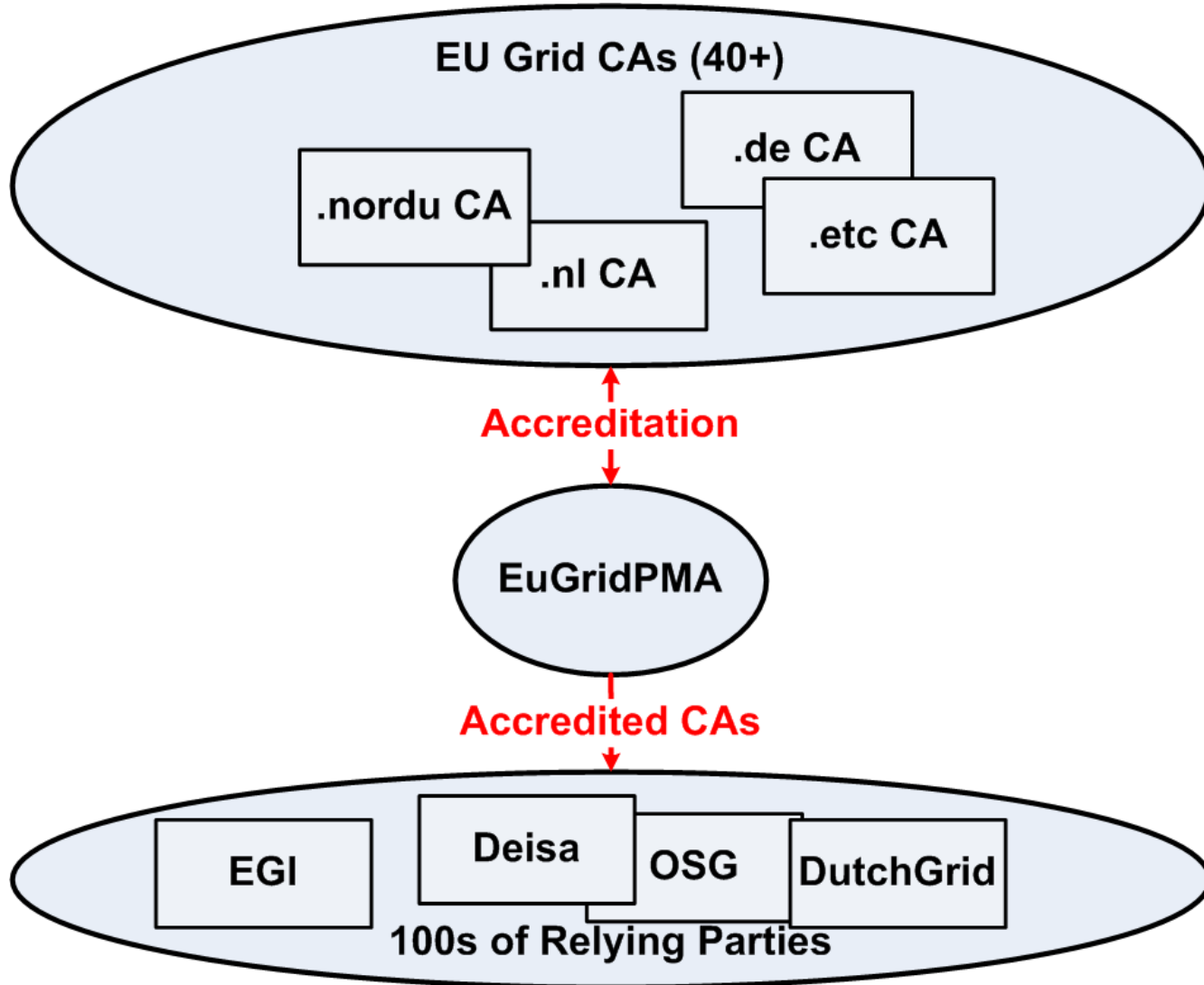


**not new:
SLCS/MICS**

establish the service

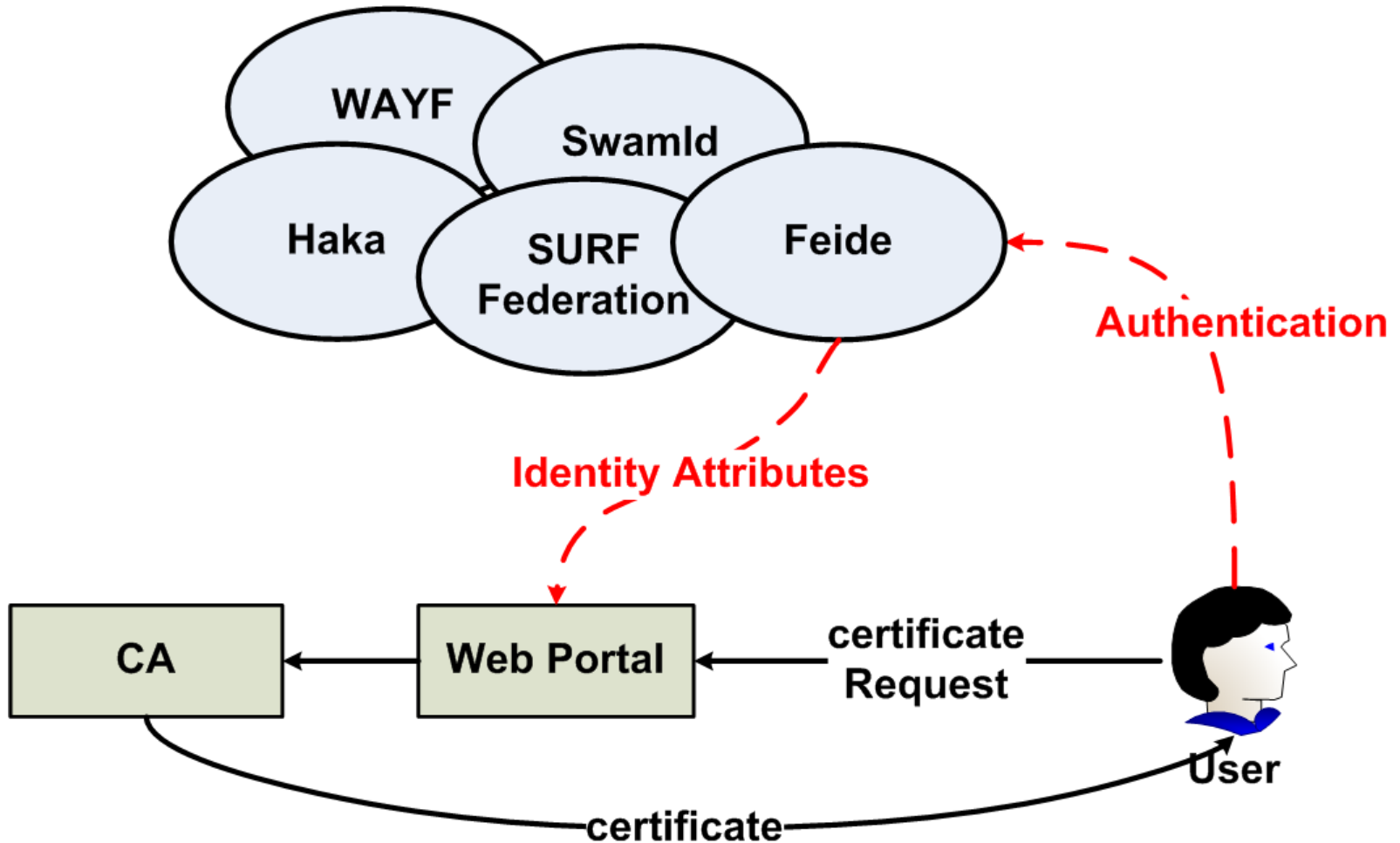
1. Certificate issuing backend
2. Web portal front end
3. EuGridPMA accreditation

EUgridPMA accreditation?



establish service
=
people hours + \$\$

Automation scales: share the cost!



use technology

an online automated CA can handle 100.000s of requests

AAI Federations

TERENA Certificate Service

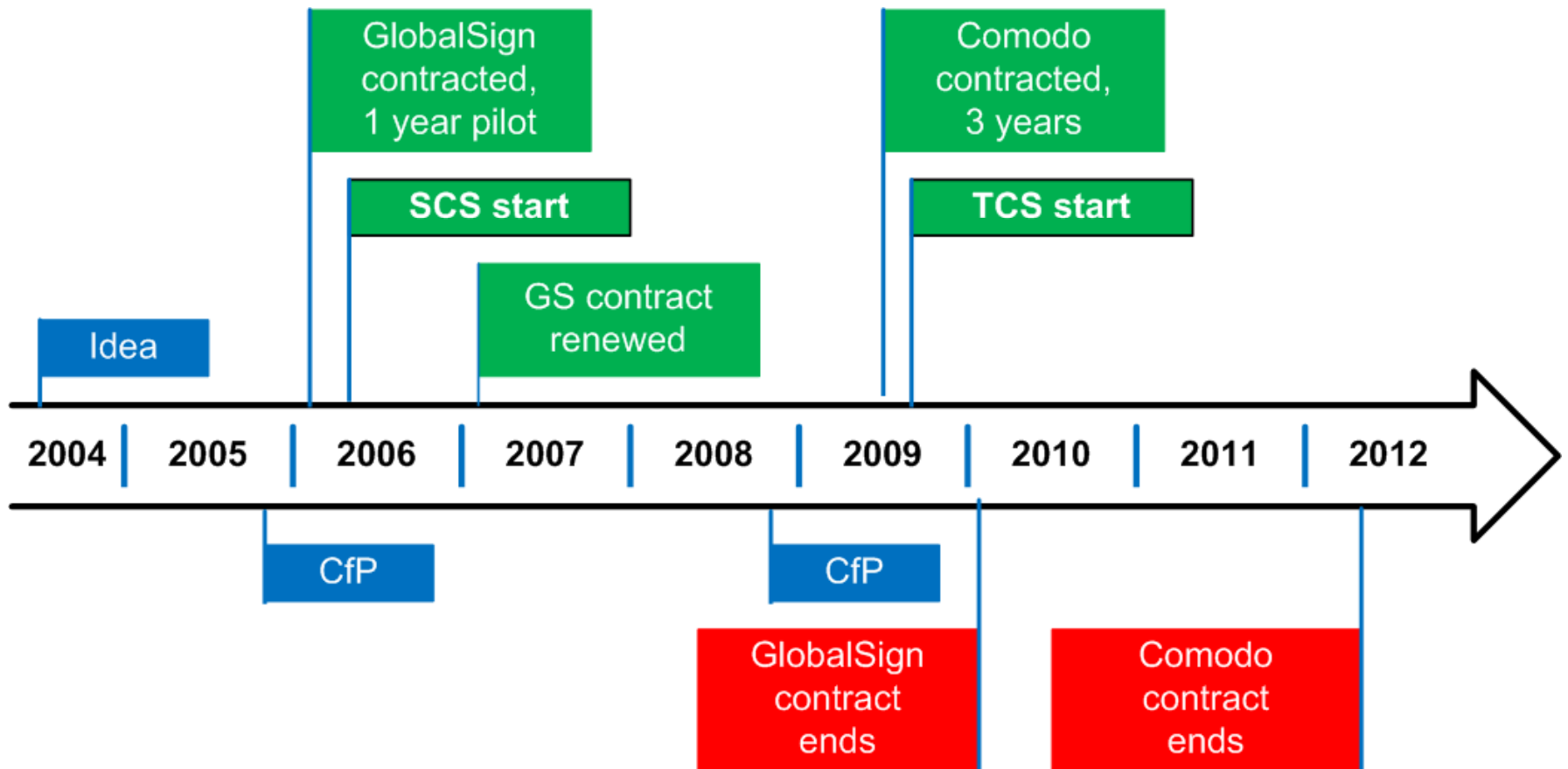
combined acquisition of certificates

operational since March 2006

current provider: Comodo

TERENA Certificate Service

by NRENs for NRENs



SCS Numbers

Apr 2006 – Aug 2008

Participating NRENs	18 (3 recent)
Certificates issued	19,400
Participating organisations	2,225
Proxies	3,800

TCS

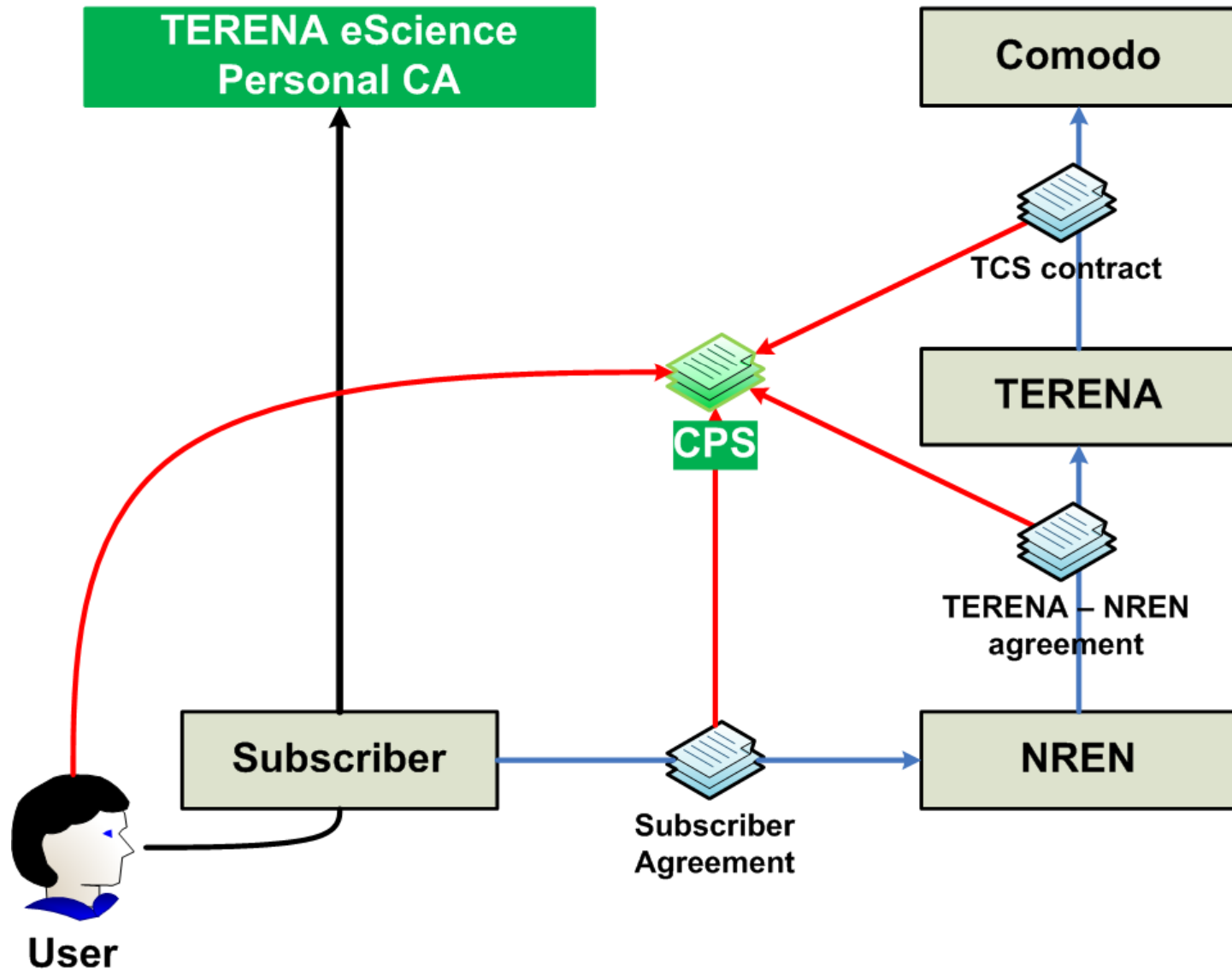
- TERENA SSL CA: Server certificates
- TERENA eScience SSL CA
- TERENA Code Signing CA

- TERENA Personal CA
- TERENA eScience Personal CA

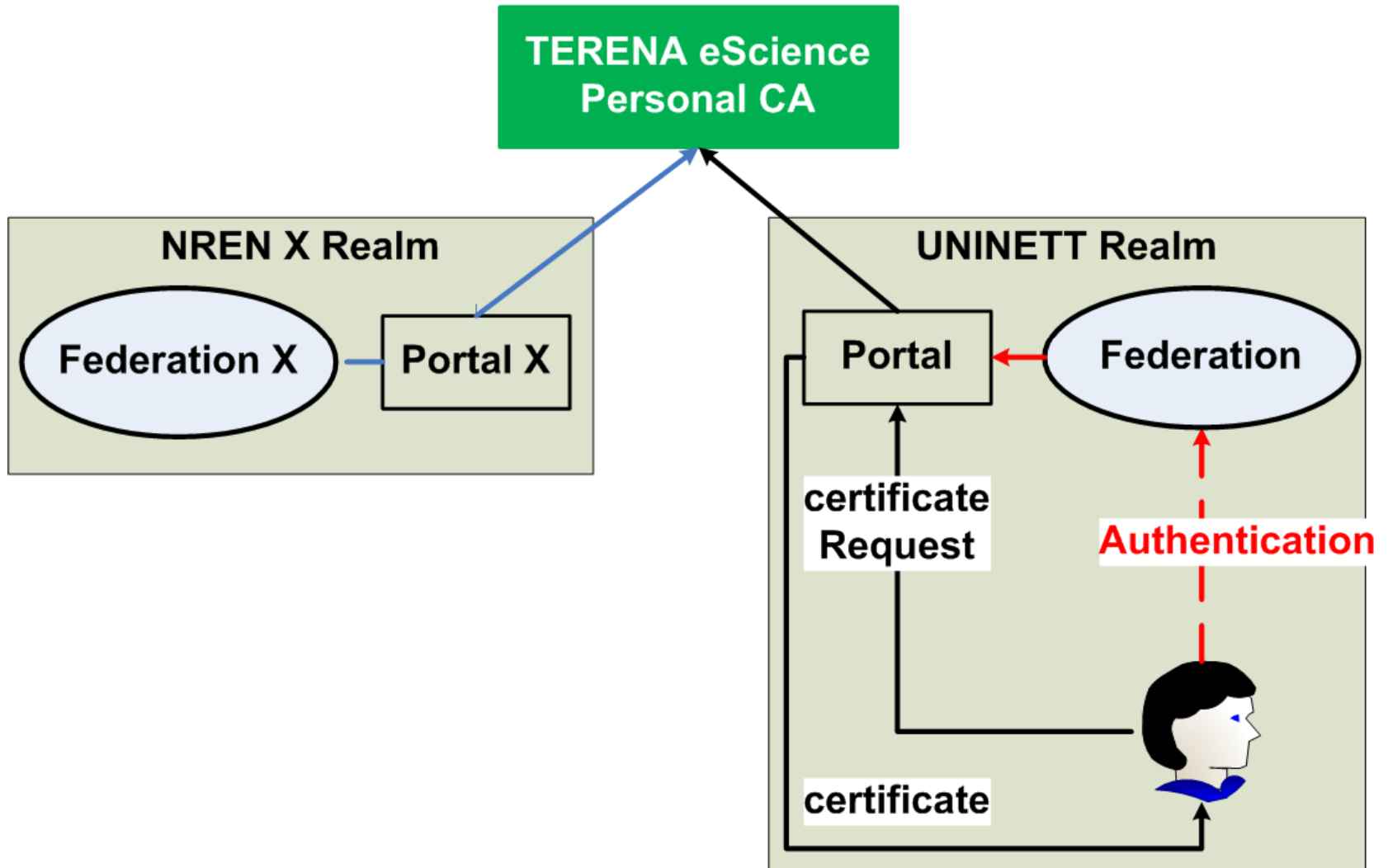
TCS Participating NRENS

Country	Member org.	Server	Code Signing	Personal
Austria	ACOnet	X	X	X
Belgium	BELNET	X	X	X
Croatia	CARnet	X		
Czech Republic	CESNET	X		X
Denmark	UNI-C	X		
France	RENATER	X		X
Greece	GRNET	X		X
Hungary	HUNGARNET	X		
Ireland	HEAnet	X		X
Italy	GARR	X		
Lithuania	LITNET	X		X
Malta	UoM	X		
Netherlands	SURFnet	X	X	X
Norway	UNINETT	X	X	X
Poland	PSNC	X	X	X
Portugal	FCCN	X		
Slovenia	ARNES	X		
Spain	RedIRIS	X	X	X
Sweden	SUNET	X	X	X
UK	JANET	X		
		20	7	12

TERENA eScience Personal CA



TERENA eScience Personal CA



steps to production

- EUgridPMA accreditation:
 - formal start in Oct 2009
- Portal software development:
 - production ready in Sept 2009
- Shared portal (.cz, .fi, .nl, .no, .se)
 - production Oct 2009
- Service operational:
 - Nov 2009

a story of smooth collaboration

- UNINETT/Sigma coordinates
- NGIs, NRENs and AAI Federations of Czech Republic, Denmark, Finland, Netherlands, Norway, Sweden
- TERENA, NDGF, all TCS NRENs
- and countless others....

Funding

- development:
 - UNINETT/Sigma, TERENA, NDGF, other participants
- operations:
 - NRENs

soon

your grid certificate
in 5 minutes

through an NREN near you



<http://www.terena.org/tcs/>

<http://www.confusa.org/>

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