

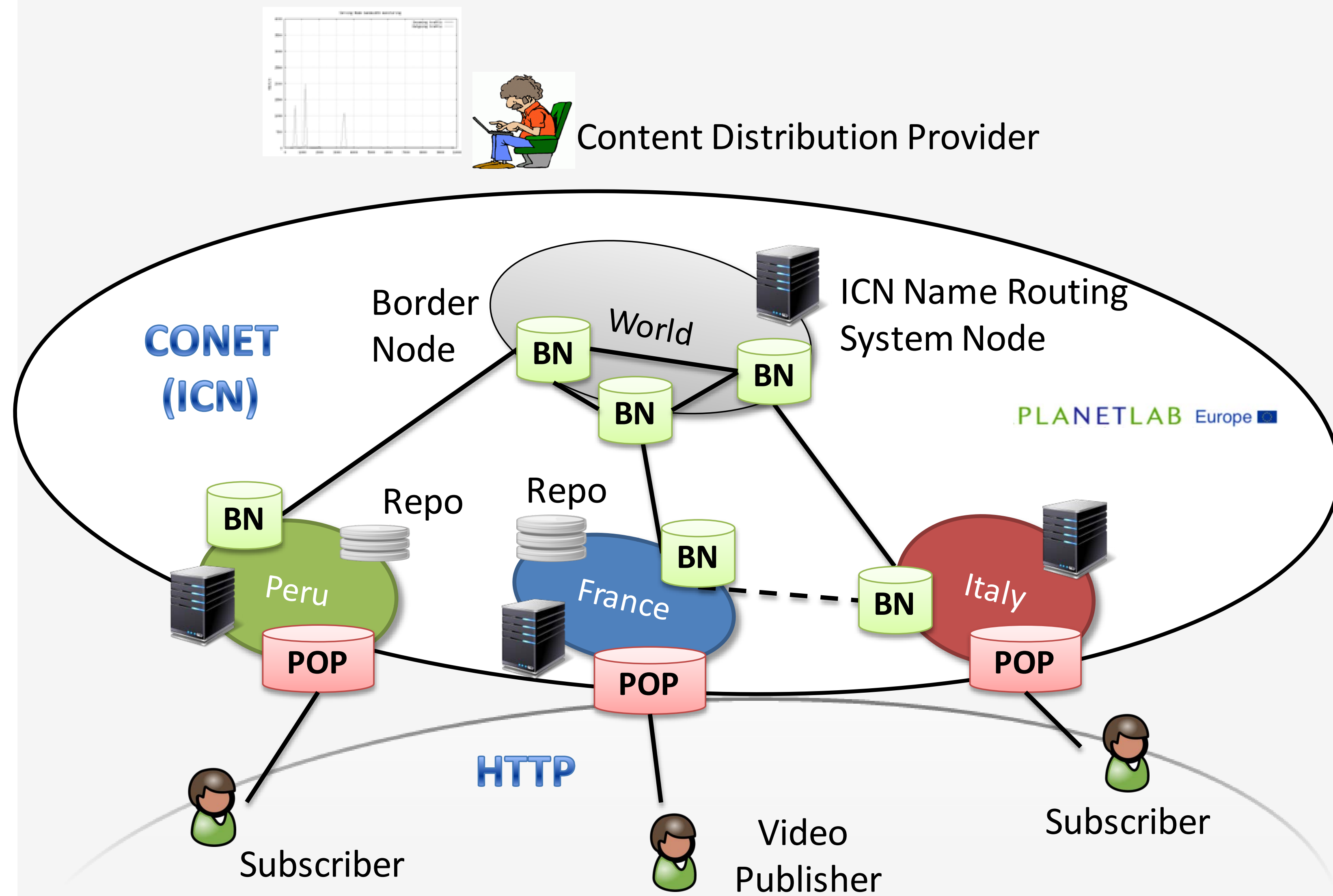


CONVERGENCE: the demonstrators



Enhancing the Internet with an information-centric, publish-subscribe service model, based on a common container for any kind of digital data, including representations of people and Real World Objects

Demonstrator of the Information Centric Network



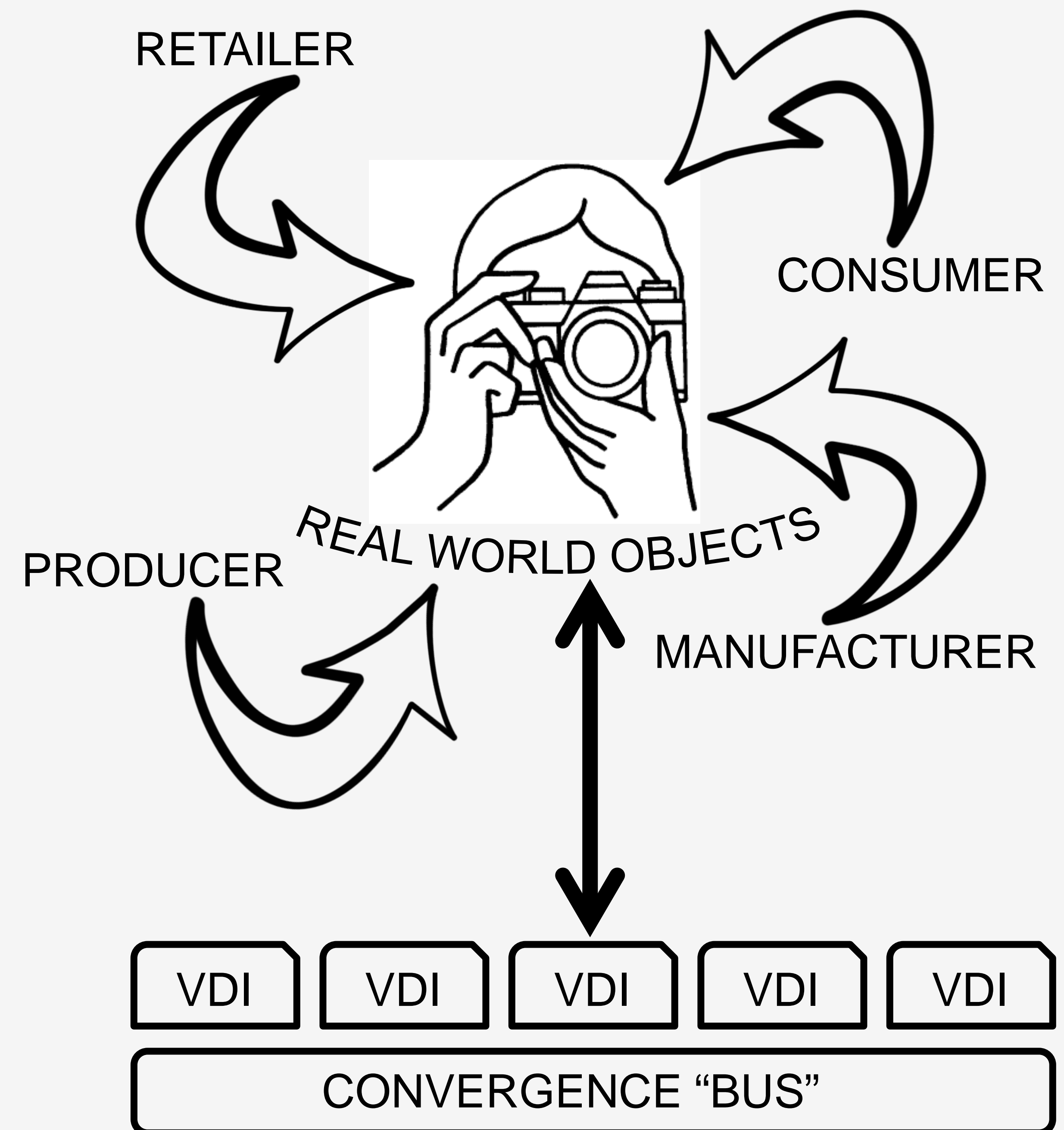
The demonstrator shows the functionality of a complete CONVERGENCE system composed of:

1. The CONVERGENCE **Information Centric Network** (CoNET) deployed on 20 PlanetLab nodes and emulating a scenario with four ICN Autonomous Systems (World, Peru, France, Italy).
2. The CONVERGENCE **Middleware** (CoMID) providing applications with content-based publish-subscribe services.
3. A CONVERGENCE **Application** for the dissemination of video materials by means of the pub/sub paradigm.

Demo users take the roles of Publisher, Subscriber and Content Distribution Provider, interacting with the CONVERGENCE System via a Web Interface:

- The Publisher injects video content in a Repository
- The Subscribers express their interest, are notified of matching video content and play the published video
- The Content Distribution Provider monitors the usage of its Repositories and may replicate the content in other Repositories
- The CONET routing plane routes-by-names video requests towards the closest repository
- The CONET in-network caching limits inter-AS traffic

Demonstrator of the Integrated Photo-Retail Application



The Integrated Photo-Retail scenario demonstrates sharing of VDIs among **different Applications**, embedding information about Real World Objects (cameras, cell phones, lens, etc...).

Users and Applications interact via **Publish/Subscribe** actions. Demo users take the roles of Content Creator (a photographer), Content Consumer, Manufacturer and Retailer:

- Users login via Single Sign On with a Secure Token
- **Product-VDIs** are created by means of a Manufacturer Application and describe e.g. cameras and lenses
- **Offer-VDIs**, describing special offers to sell these products, are created by means of a Retail Application
- A Photographic Archive Management (PAM) Application includes automatically-generated camera information from EXIF, such as camera model and lenses, within **Photo-VDIs** uploaded by the Creator
- After publication, CONVERGENCE can associate **Photo-VDIs** with **Product-VDIs** for camera and lenses
- Consumer browses images with the PAM Application. The PAM subscribes by itself to **Offer-VDIs** of equipment (e.g. for the lens used to shoot the photo). Matching Offers are shown to Consumer, who can then buy Products

www.ict-convergence.eu

