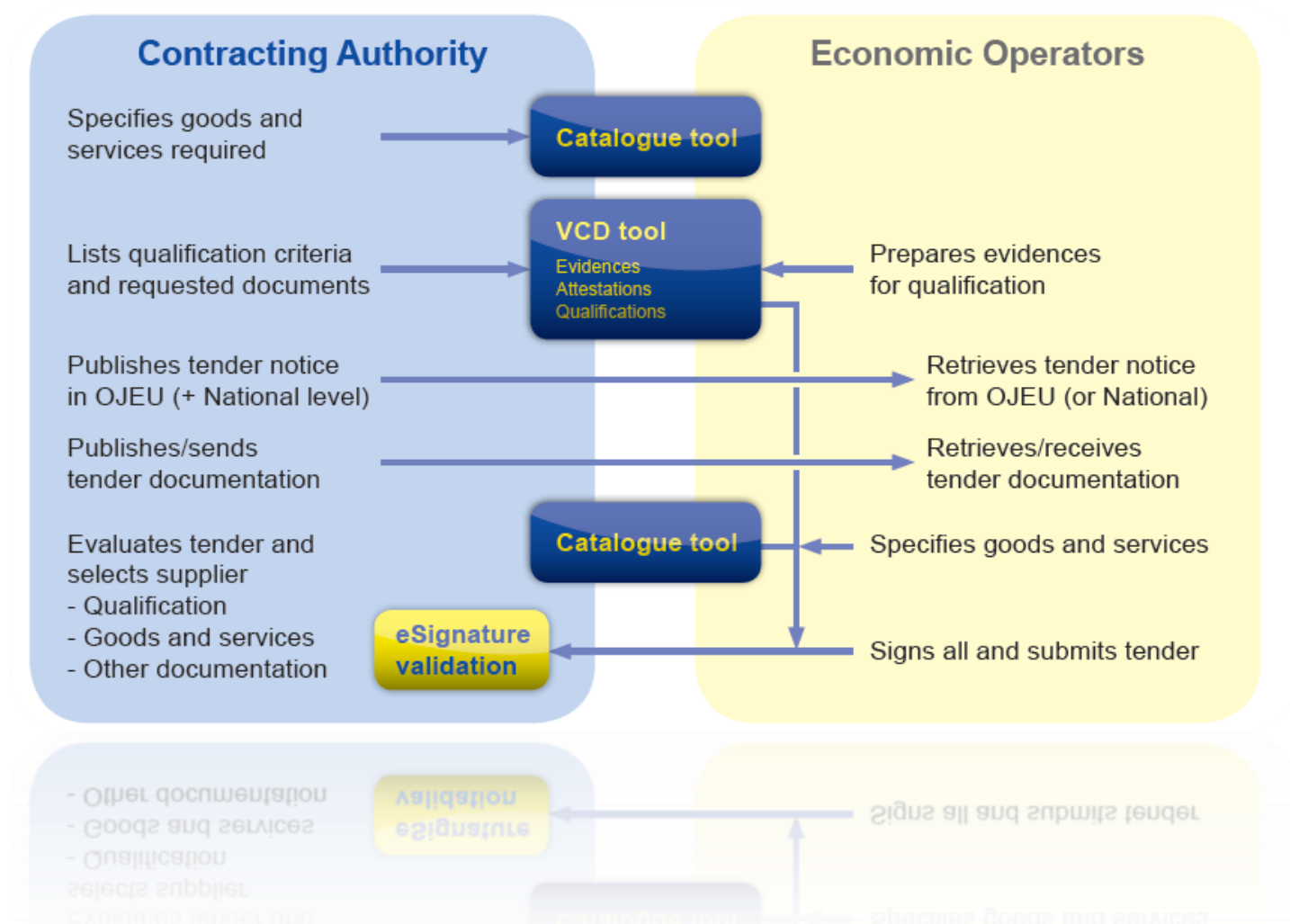




# The pre-award process – Preparation and submission of tender



## Software building blocks (1/2):

### ▶▶ **European VCD System (EVS)**

Provides the decision support for deriving the evidences in order to meet the required criteria pursuant to the underlying legal rule sets (represented as machine interpretable ontologies). The EVS hosts the ontologies, provides the reasoning and makes decision support accessible via system and user interfaces.

### ▶▶ **Ontology Management System**

Provides the editing and management functionality for the different ontologies the EVS is basing its decision support on. The Ontology Management System can be used simultaneously by the different ontology editing teams to keep the legal rule set up to date.

### ▶▶ **National VCD System (NVS)**

Provides a full range of VCD functionalities to the Economic Operator from the initial selection of criteria (via the VCD Designer) to the finalization of a validated VCD Container (through the VCD Builder). Depending on national implementation architecture decisions, implementers can use all or part of the reference implementations for a NVS.

## Software building blocks (2/2):

### ▶▶ EVS/NVS interaction

As a logical building block, this includes EVS/NVS Service Interface Components. Depending on national implementation architecture decisions, it may use the generic VCD Designer for the NVS-side functionality, which is interacting with the EVS/NVS service interface of the EVS.

### ▶▶ VCD Builder

A web or desktop application allowing users to create/build a VCD Package and is part of the NVS reference implementation

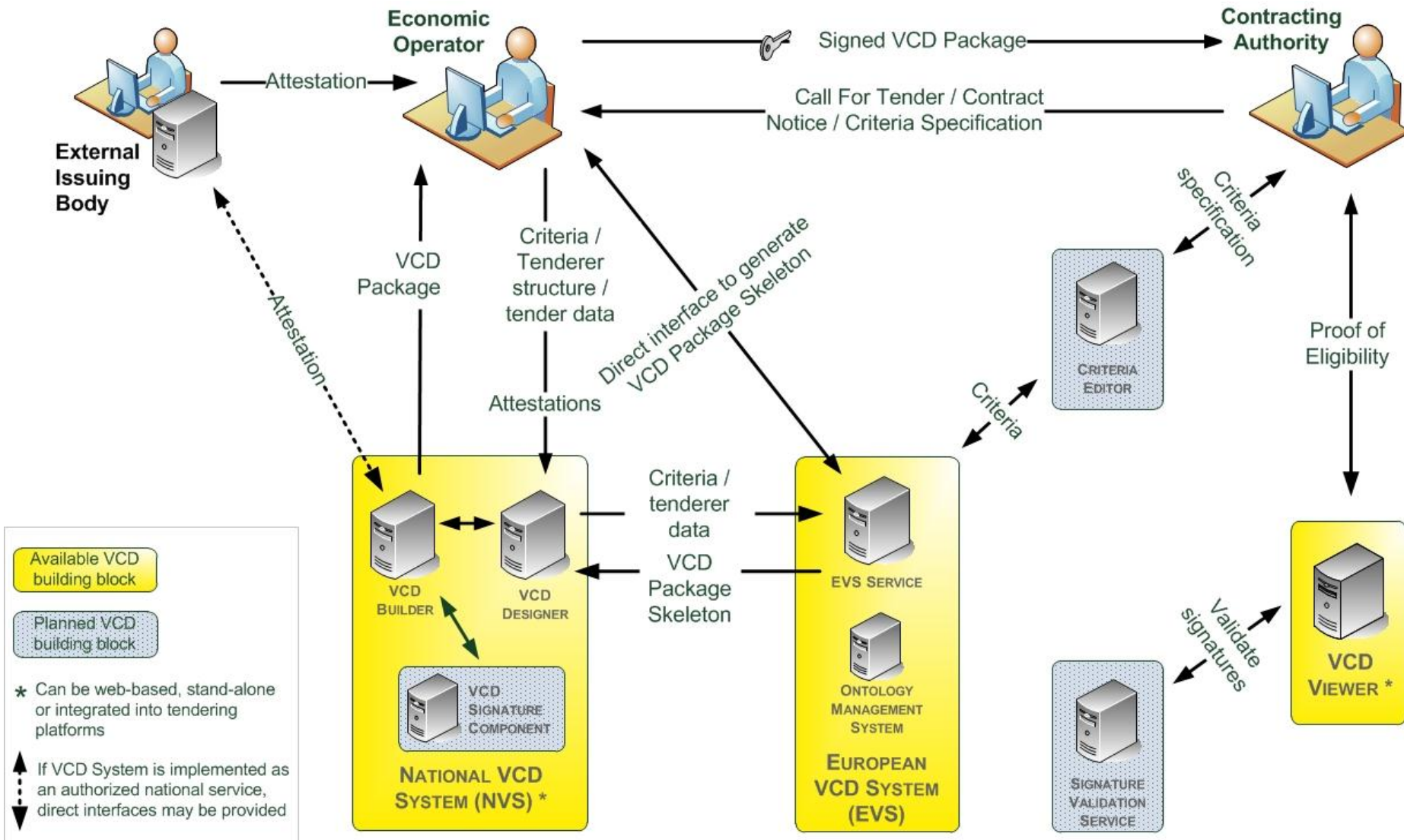
### ▶▶ VCD Designer

A component allowing users to create a TCE Skeleton that can be used by the VCD Builder for the creation of the desired VCD, taking into account the tender structure and the suggestions from the EVS. Together with the VCD Builder, it can be used in a desktop or web-based NVS environment.

### ▶▶ VCD Viewer

A web application allowing users to view the content of VCD Packages.

# ICT Architecture Framework (full support scenario)



# ICT Architecture Framework (full support scenario)

## Scenario description:

- ▶▶ The economic operator uses the NVS (in particular the VCD Designer and VCD Builder) to create a VCD by inputting tenderer data, criteria information from the call for tender and evidence documents.
- ▶▶ The VCD Designer is connected to the EVS to identify suitable evidences for the economic operator and to create the VCD Skeleton.
- ▶▶ The VCD Builder is used to input the missing information into the VCD Skeleton (e.g. uploading evidence documents).
- ▶▶ Evidences can also be automatically retrieved by issuing bodies which are connected to the NVS.
- ▶▶ Once the VCD Package is compiled, it can be submitted to the contracting authority, which uses the VCD Viewer to proof the received VCD Package and the eligibility of economic operators.
- ▶▶ If a VCD has been signed by the VCD Signer, the electronic signature can be verified via an interface to the signature validation service.

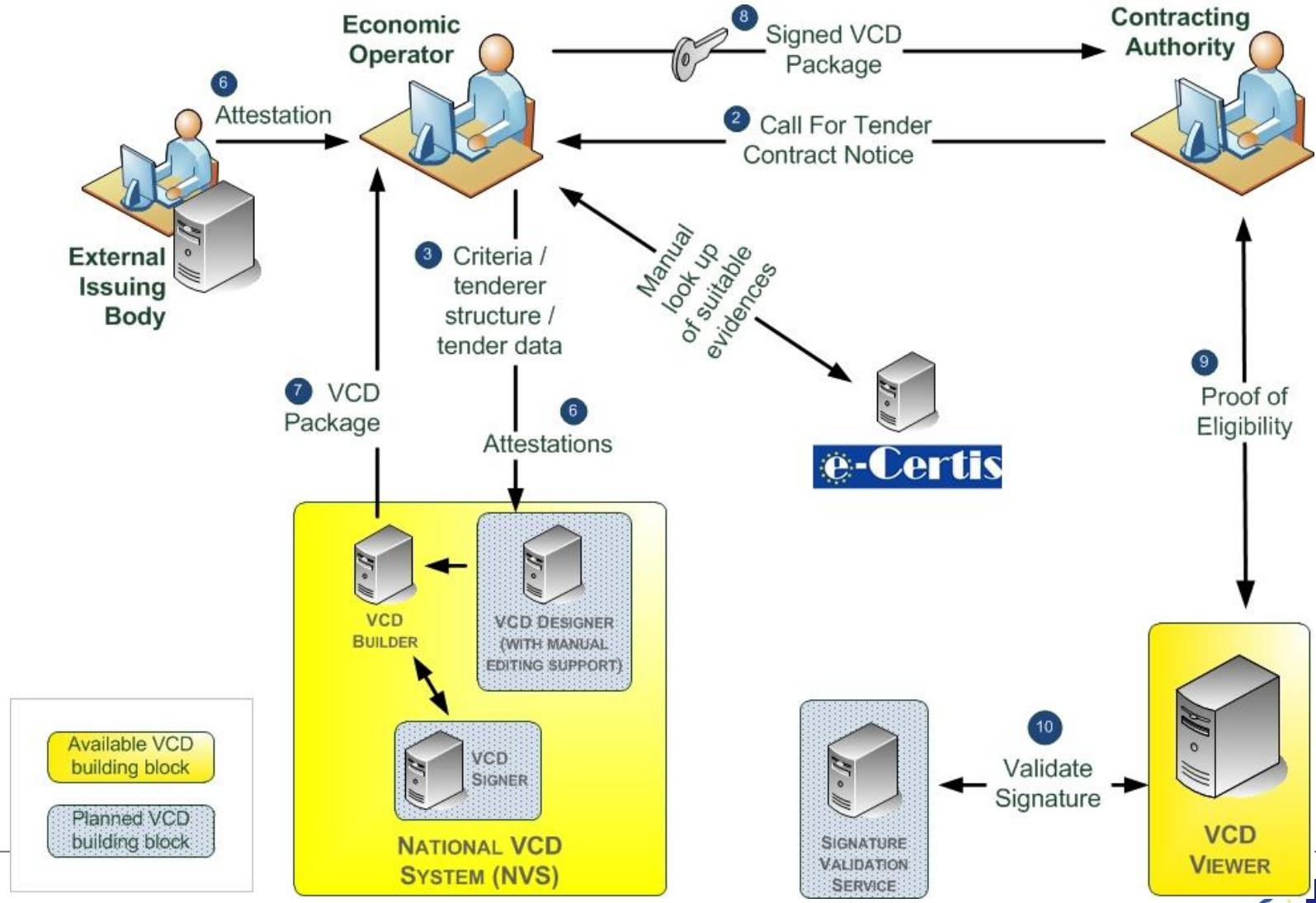
# ICT Architecture Framework (stand-alone scenario)

## Scenario description:

- ▶▶ The stand-alone scenario slightly differs from the full support scenario: In case no national VCD solution exists, the economic operator uses the direct interface to the EVS to create the VCD Skeleton.
- ▶▶ Using the stand-alone VCD Builder installation, economic operators can then provide the Skeleton retrieved from the EVS and input missing information and documents to create a VCD Package.
- ▶▶ Furthermore, interfaces to issuing bodies do not exist as there is no national VCD solution, hence economic operators have to retrieve evidences directly from issuing bodies.



# ICT Architecture Framework (manual scenario)





# ICT Architecture Framework (manual scenario)

## Scenario description:

- ▶▶ The manual scenario covers the cases in which the national procurement legislation of a country is not covered by the ontology of the EVS as well as no national VCD System exists.
- ▶▶ The economic operator uses the manual VCD Designer (with manual editing support) to create a VCD Skeleton. The eCertis database or other information sources can be used to identify suitable evidences for the requested criteria (this replaces the automatic criteria-evidence mapping performed by the EVS via the ontology).
- ▶▶ Once the Skeleton is created, the VCD Builder (stand-alone installation) is used to input missing information and documents in order to compile a VCD Package.

Dependencies to several (external) components exist:

- ▶▶ Issuing services (automatic retrieval of evidences)
- ▶▶ WP1 Signature validation service (verification of digital signatures)
- ▶▶ eCertis database (manual criteria-evidence mapping)
- ▶▶ WP8 Transport infrastructure

## ▶▶ EVS Service (central)

Provides the mapping between criteria and suitable evidences by performing a reasoning based on the ontology. The NVS/EVS interface implemented in the VCD Designer relies on this service to create a VCD Skeleton based on the information about requested criteria and tenderer.

## ▶▶ VCD Builder Proxy Service (decentral)

Used by the VCD Designer to redirect a generated VCD Skeleton to the VCD Builder.

## ▶▶ VCD Signer (decentral)

This service will be part of the VCD Signature component. It is a service to attach digital signatures to a VCD Package.

## ▶▶ Signature validation service (decentral)

This service will be part of the VCD Signature component, relying on validation capabilities developed by WP1. It is a service to verify digital signatures of a VCD Package.

# eProcurement without borders in Europe

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