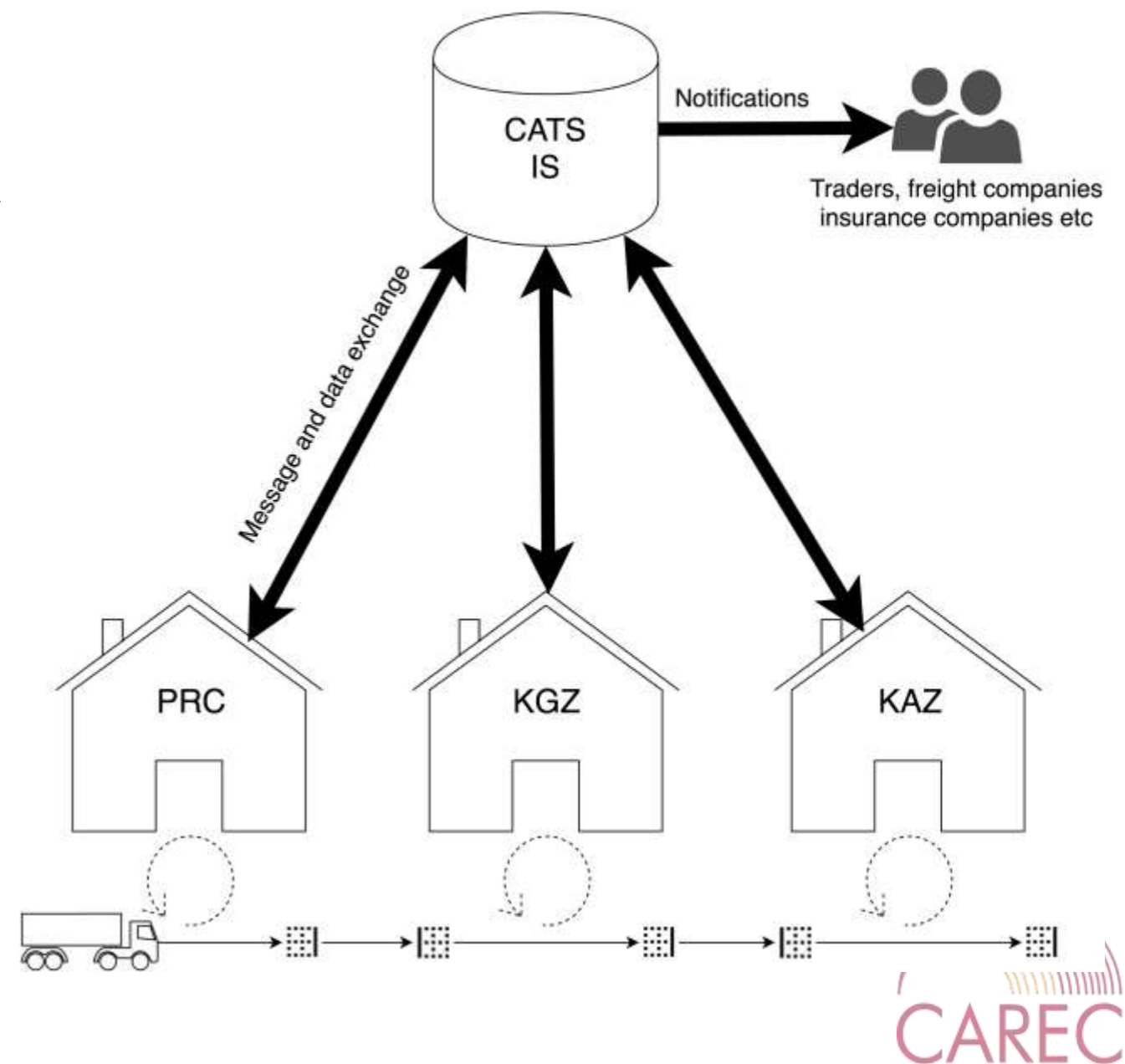# ICT Solutions for CGM

Overview and Recommendations

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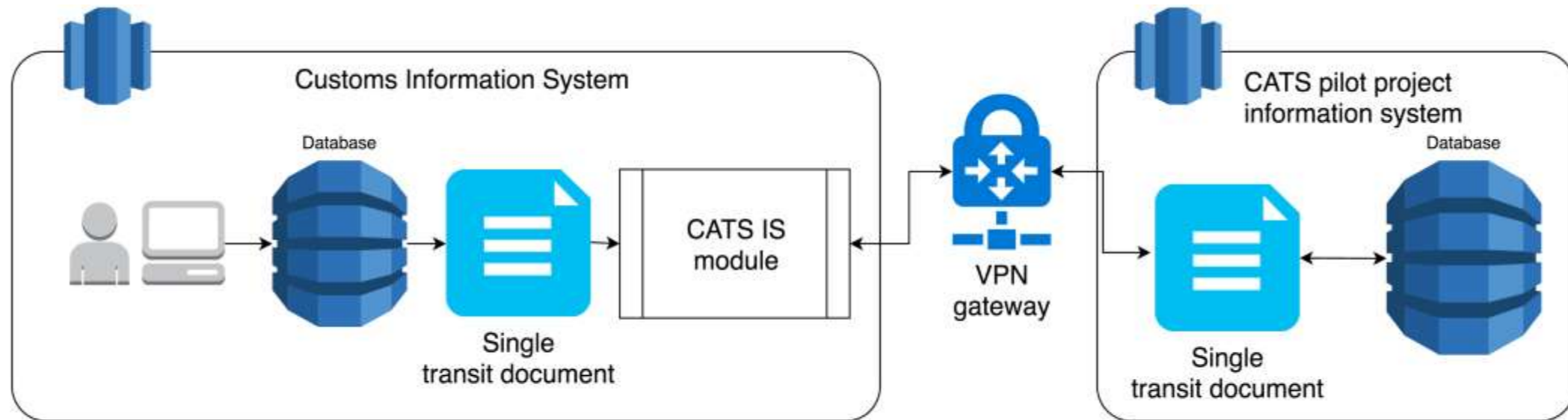# ICT system – general requirements

- A centralized protected system using reliable communication channels for data exchange with all participants

- Unified data exchange interface

- Advanced ownership/permission control for all data items/messages

- Digital signature usage
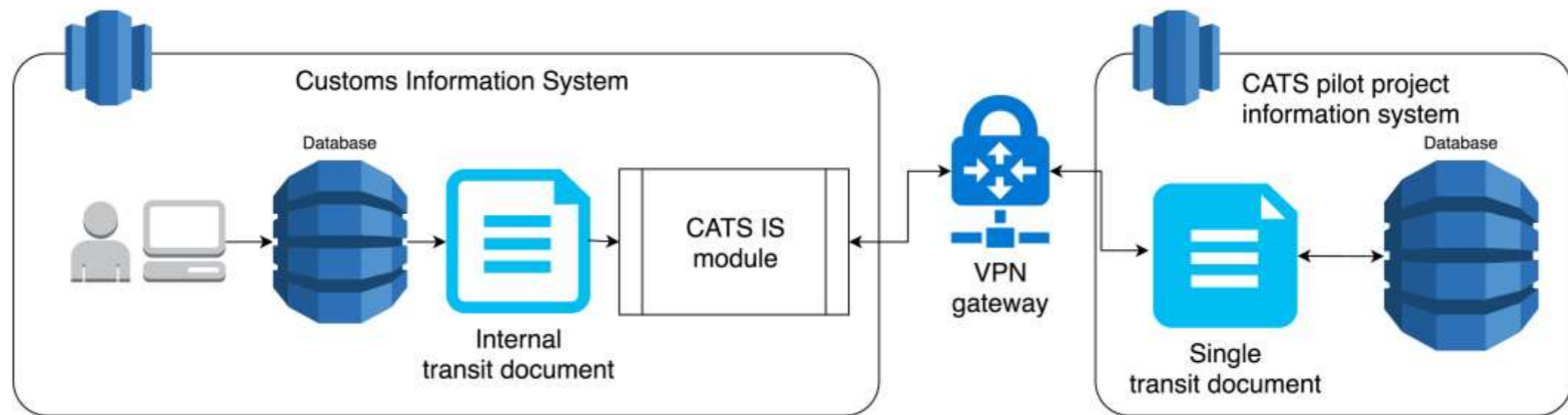
ICT system - components

- Data exchange platform, ensuring, first of all, operations with the single transit document

- Platform for message exchange

- System for message/document routing as consistent with a transit route

- Input data format and logic control system

- Internal payment system or integration with an existing payment system to process and/or control automated money transfers for CGM purposes

- Notification interfaces (email, SMS, instant messengers)

- Fallback & Recovery System

Interface - single transit document based

- using own customs information system, to work directly with the single transit documents, located in the CATS information system

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Interface - internal document based

- transparent translation of the data, contained in the customs information system, into the single transit document stored in the CATS IS
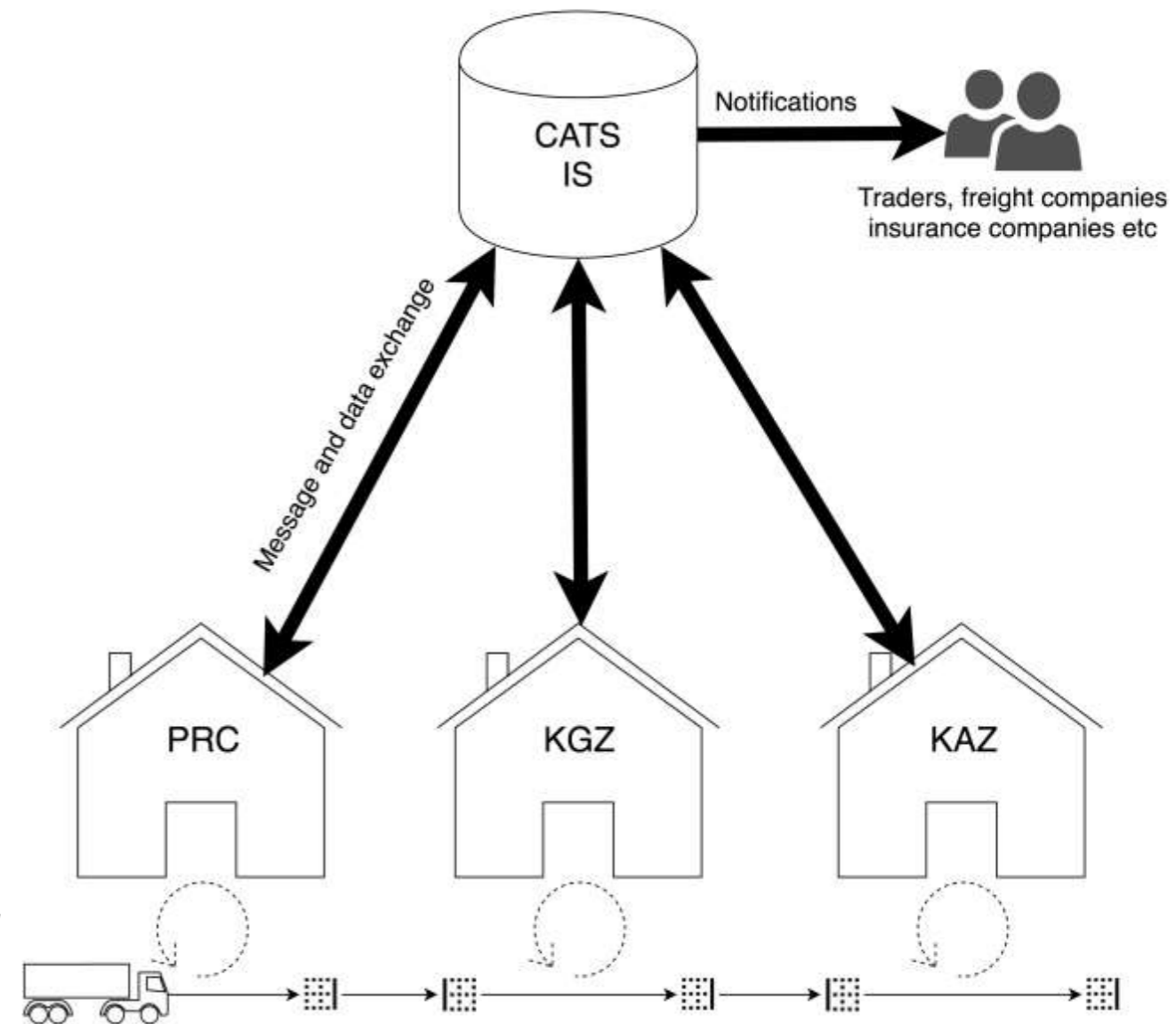
Implications for ICT systems

- Customs Automated Systems

  - A protected high-speed reliable communication channel with CATS IS

  - A gateway supporting data exchange and messaging with CATS IS on the side of the customs IS

  - Corresponding modifications in the components related with the transit, risk management, Authorized Economic Operators registries and other transit-related modules
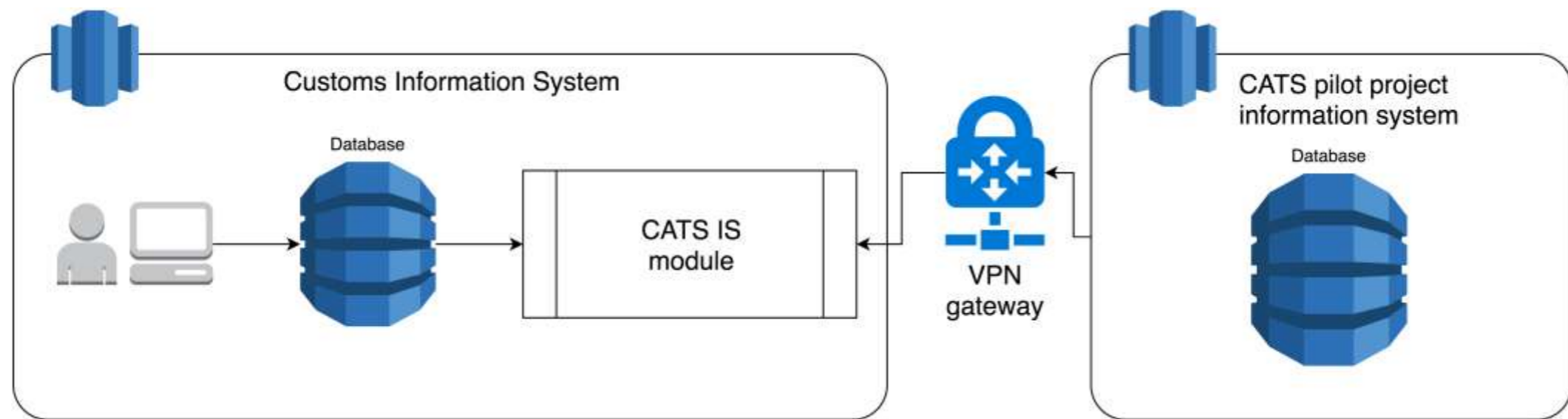
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Implications for ICT systems

- Other potential integration/interfaces
  - Single Window Principle Implementation Projects
  - Payment Systems
  - Major Market Participants' Information Systems

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Suggested ICT system architecture for the pilot project

- General requirements
  - A centralized protected system using reliable communication channels for data exchange with all participants;
  - Unified data exchange interface open to the participants, based on the standards used by the majority of the participating countries
- Components:
  - Data exchange platform supporting operations with the agreed single transit document;
  - Platform for message exchange between the participants, which will be used, inter alia, to support the processing of payments under the CGM;
  - Status control of the of guarantee payments under the CGM;
  - Notification interface (email, SMS, instant messengers) for all system participants, including the carriers, customs brokers and freight owners, for the delivery of notices and document statuses, and messages within the system, such as the status of transit, etc.
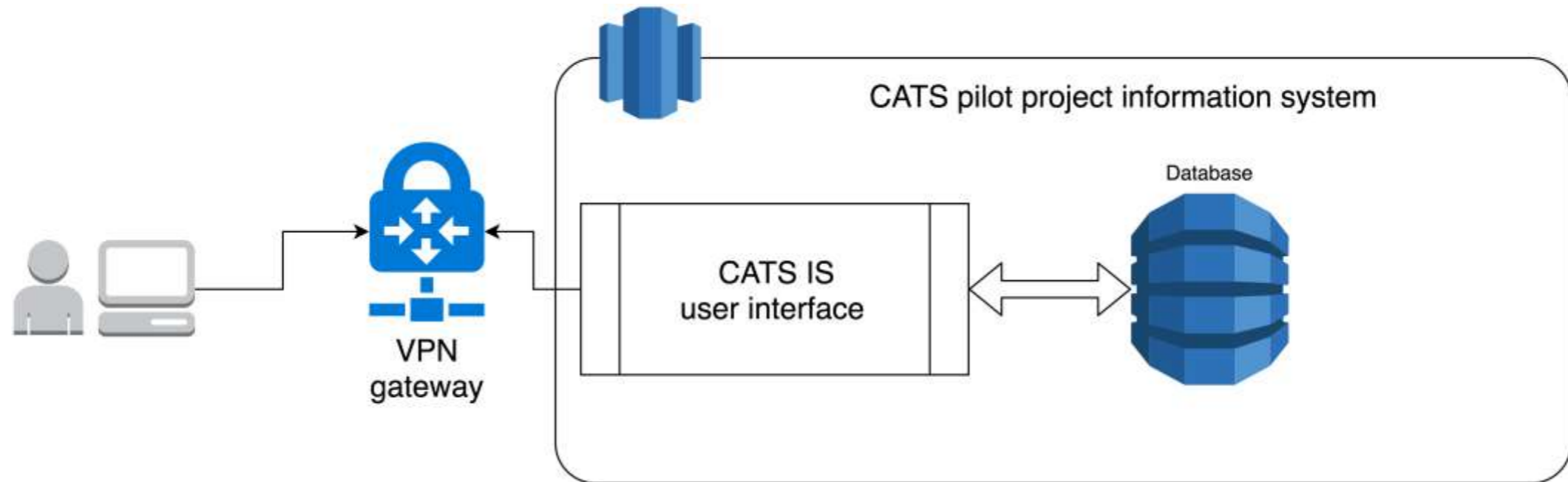
Interface - CATS IS module

- a. Gateway enabling customs personnel to access the single transit documents in the CATS information system directly from their customs information systems;

- b. Gateway providing transparent translation of the data from the customs information system into the single transit document format

Interface - CATS IS module

- Interface on the CATS IS side, enabling customs officers to work with the single transit documents, messages, and notices directly in the CATS IS

Internationalization (I18N) issue

- An option, where the fields in the documents to be lodged are filled in all necessary languages (Russian and Chinese);

- Use of the agreed glossary of terms

- Use of a machine translation system, including the translation of attachments to the single transit document

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ICT systems in Pilot countries - Kazakhstan

- UN E-Government Development Index 28 (+10)

- ASYCUDA migration - 2017

- Eurasian Customs Union - modernization

- Web-services

- China - Kazakhstan data exchange experiment*

- own vision of Single Transit System

* I18N(!)

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ICT systems in Pilot countries – Kyrgyz Republic

- UN E-Government Development Index 101 (-1)
- Unified Automated Information System
- Eurasian Customs Union - modernization
- Full-scale data-exchange with ECU countries
- Foreign Trade Single Window project

Recommendations

- Pilot project

  - Software Requirements Specification

  - Comparability with existing system

  - New requirements and dependencies

- Information system for CAREC Advanced Transit System

  - Based on the pilot project

  - Detailed workflows and in-deep analysis

  - SRS