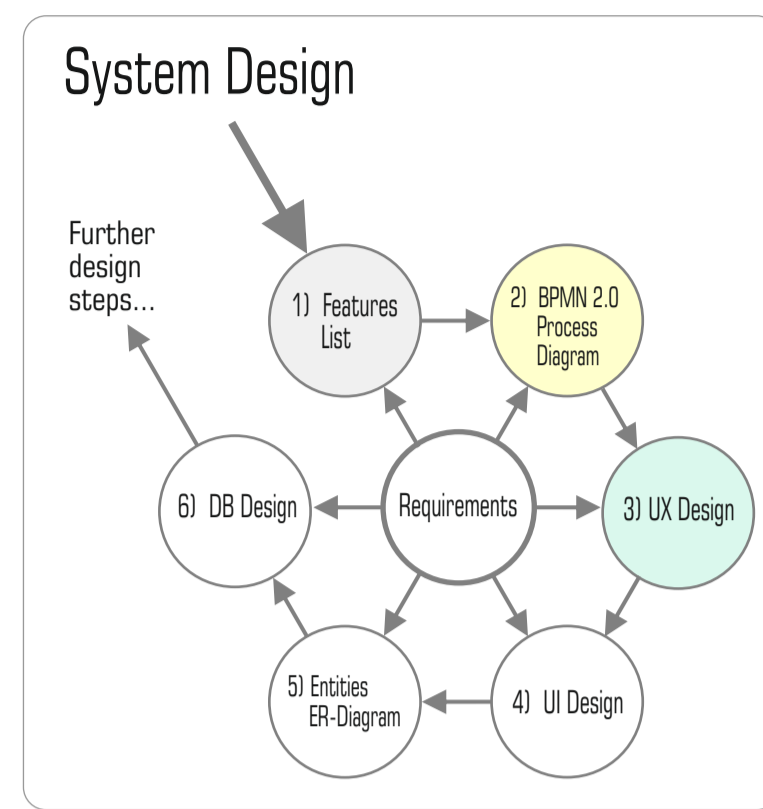


# eFCIS | Electronic Food Chain Inspection System (1)

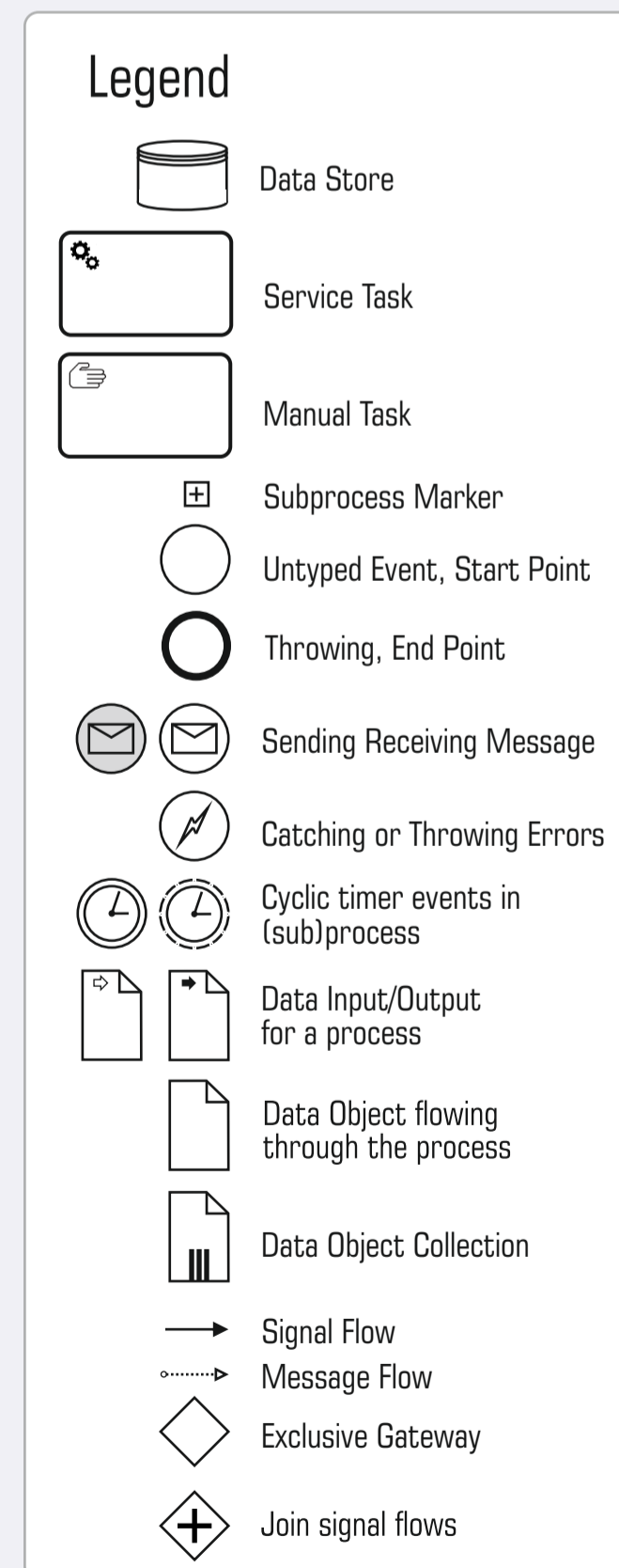
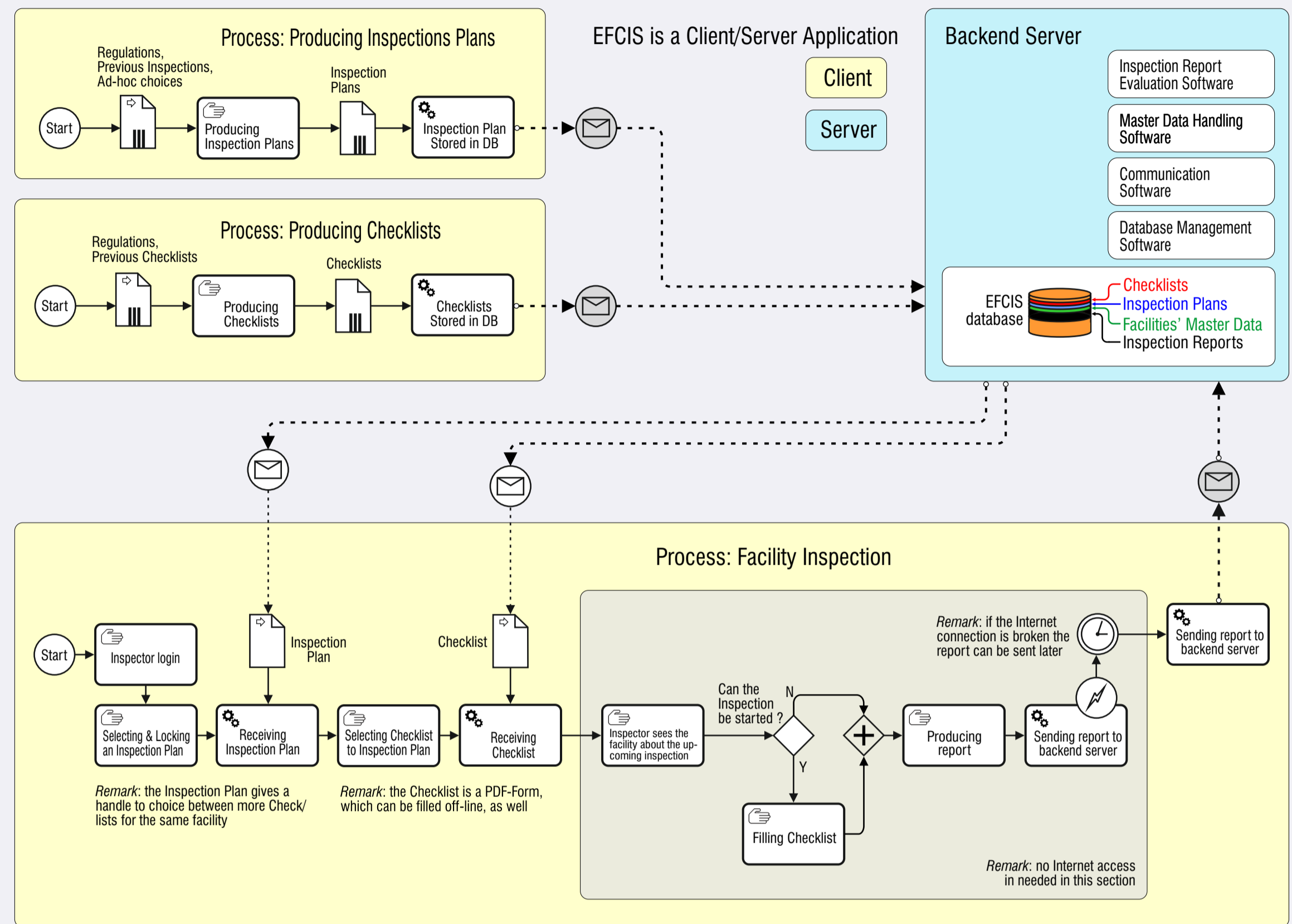


### eFCIS: Electronic Food Chain Inspection System Features\* List

- Facility & importer reinspection, and accountability control of
  - Food producers,
  - Food processors,
  - Food ingredient suppliers,
  - Food retailers,
  - Foodservice establishments
  - Pharmacies
  - Veterinary medicine dealers,
  - Veterinary medicine producers.
- Regular, ad hoc and triggered reinspection and compliance control on the spot; results are sanctioned with administrative detention, prompt or different prosecuted manner.
- Inspection Plans and Checklists depend on inspected facilities, are prepared, and can be downloaded in advance.
- The inspector stores the filled-in checklist electronically on a tablet, and sends it prompt, or in case of missing Internet connection, later to a central data processing server using a WEB-service (no thick client is needed to use).
- Sophisticated algorithms evaluate the uploaded checklists and generate statistical statements to check the inspections' effectivity.
- The inspector has the opportunity to download and display the results of previous inspections of the facility just monitored or even others, as desired.
- The inspector is also able to add to the checklist
  - Remarks as free text,
  - Photos, videos, and audio recordings.
- The procedural powers and of the inspectors and the sanctions they may impose are checked and regulated electronically.

\*Remark:  
The feature is (1) an expressly profitable and individual measurable property or characteristic of a phenomenon (2) expressed with the customer's terminology and (3) being observed directly by the customer.  
More formal: A feature is a triplet,  $f = (R, A, S)$ , where  $R$  represents the requirements the feature satisfies,  $A$  the assumptions the feature takes about its environment and  $S$  is its specification.

## Electronic Food Chain Inspection System (eFCIS) | Business Process Schematics (BPMN 2.0)



### The Electronic Food Chain Inspection System (eFCIS)

is a client/server application designed with the aim of continuous monitoring of the facilities supervised by NEBH. The inspections are based on checklists prepared in advance. The results of the inspections are formalized reports that are evaluated automatically by the eFCIS, in some cases manually.

Before the inspection, the inspector downloads the inspection plan for the facility to be inspected and then the corresponding checklist.

Upon arrival at the physical location of the facility, the inspector sometimes may not be able to begin the inspection. A report is also made of the failed inspections, which is eventually stored in the backend server's database.

The checklist itself is a PDF form that does not require access to the Internet: the completed report can be uploaded to the backend server database at a later date.

The BPMN 2.0 diagram focuses on the inspection process, so it does not include much of the housekeeping features such as metadata maintenance, automatic evaluation of incoming reports.

From the IT technology perspective:

The browser-based client components of the application can be either desktop computers or portable devices such as tablets and notebooks. No paper-based sub-solutions are in use.

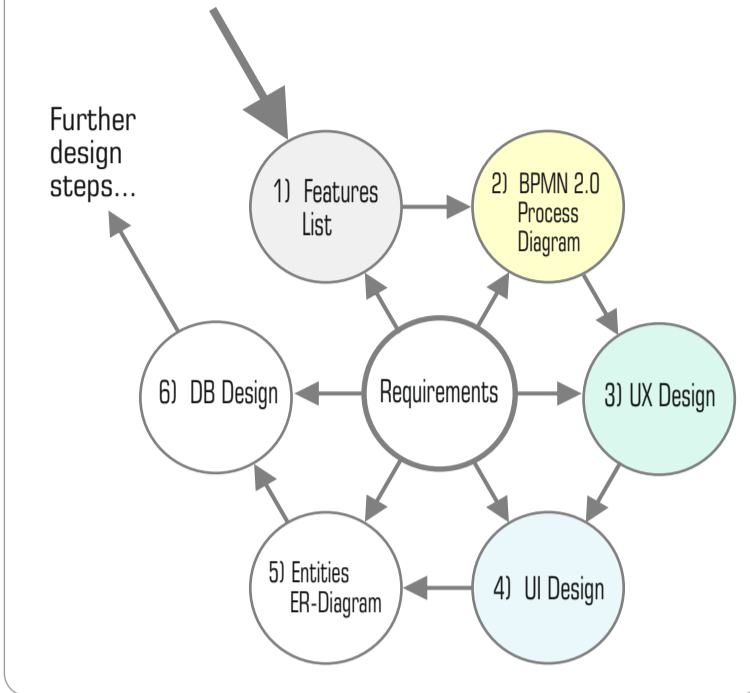
A high degree of independence from the host IT landscape was a fundamental design goal, as the easy to use and elementary simplicity.

## eFCIS: Electronic Food Chain Inspection System UX-design | Menusystem

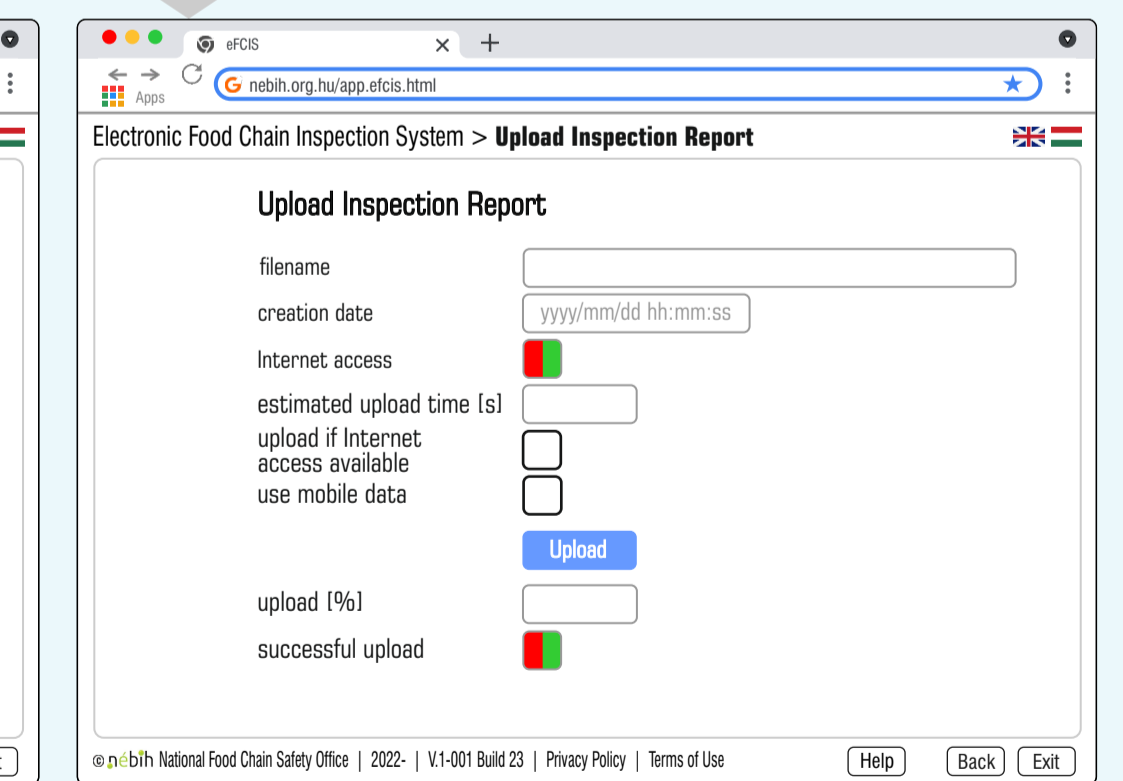
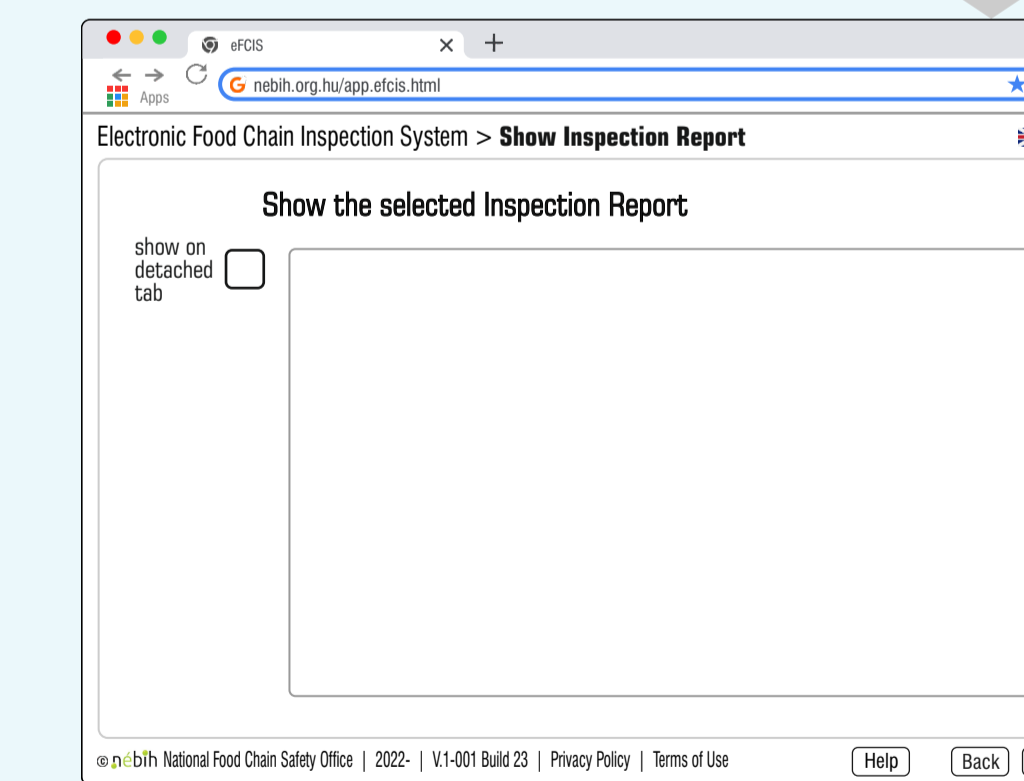
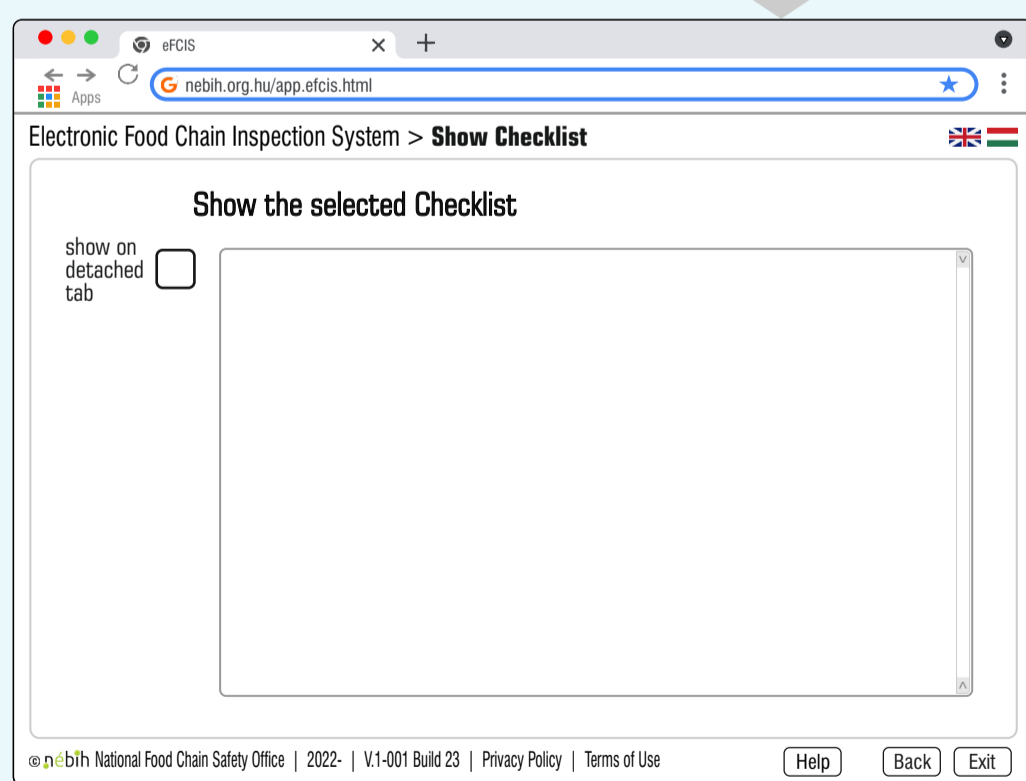
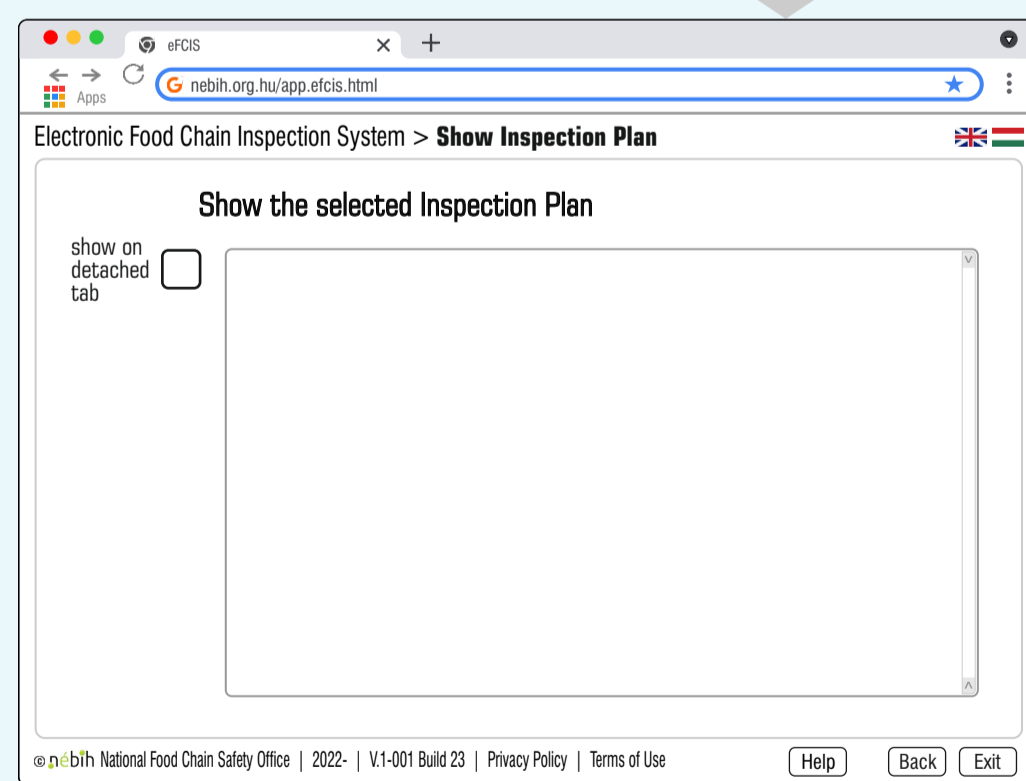
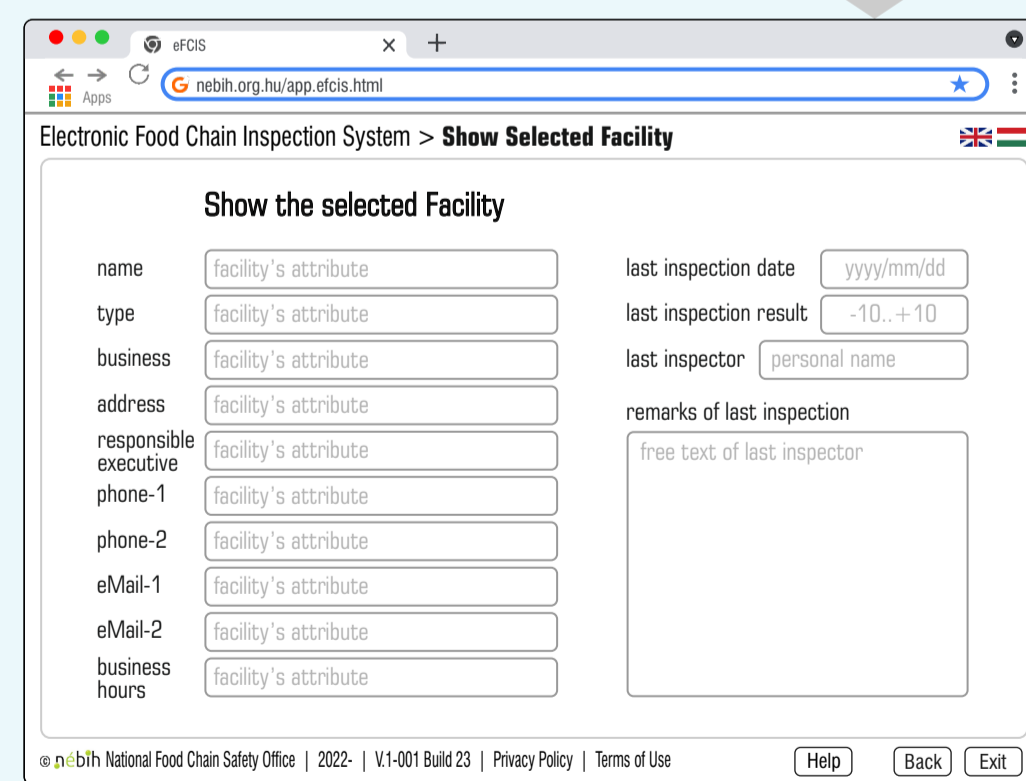
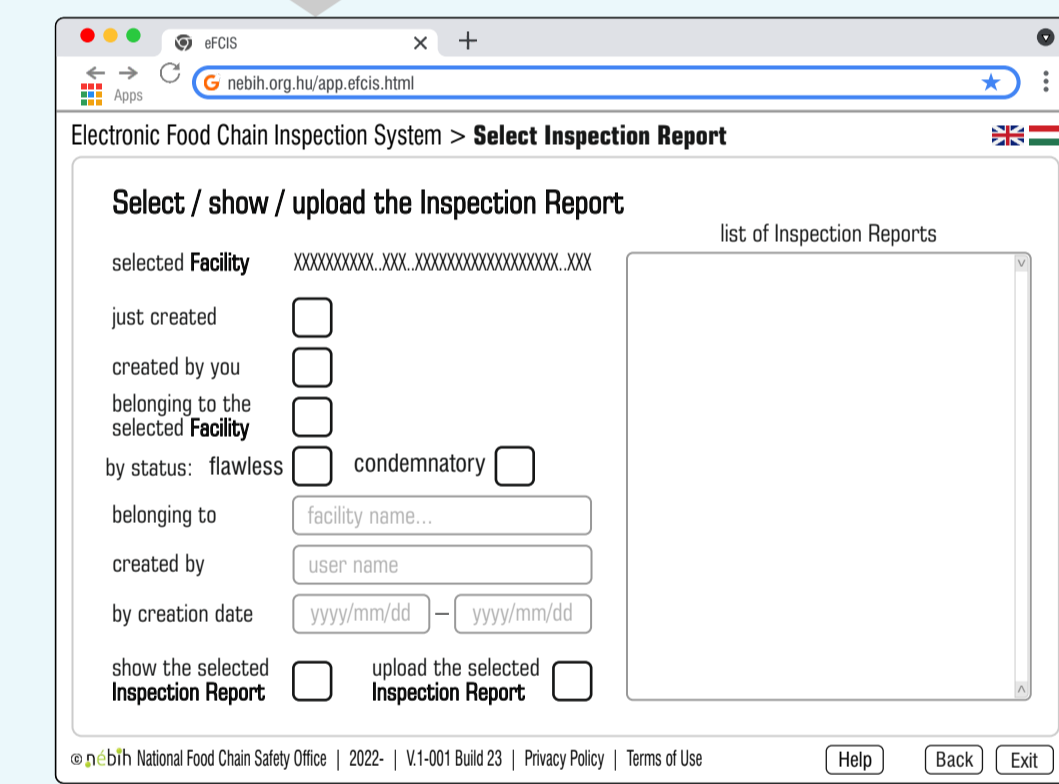
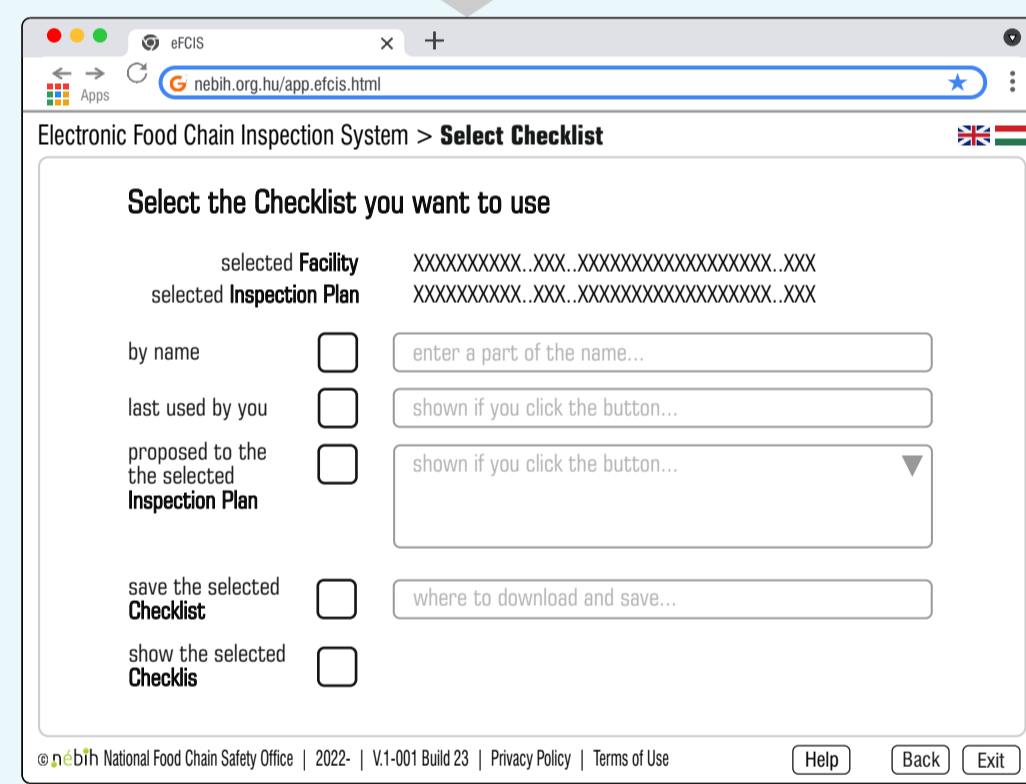
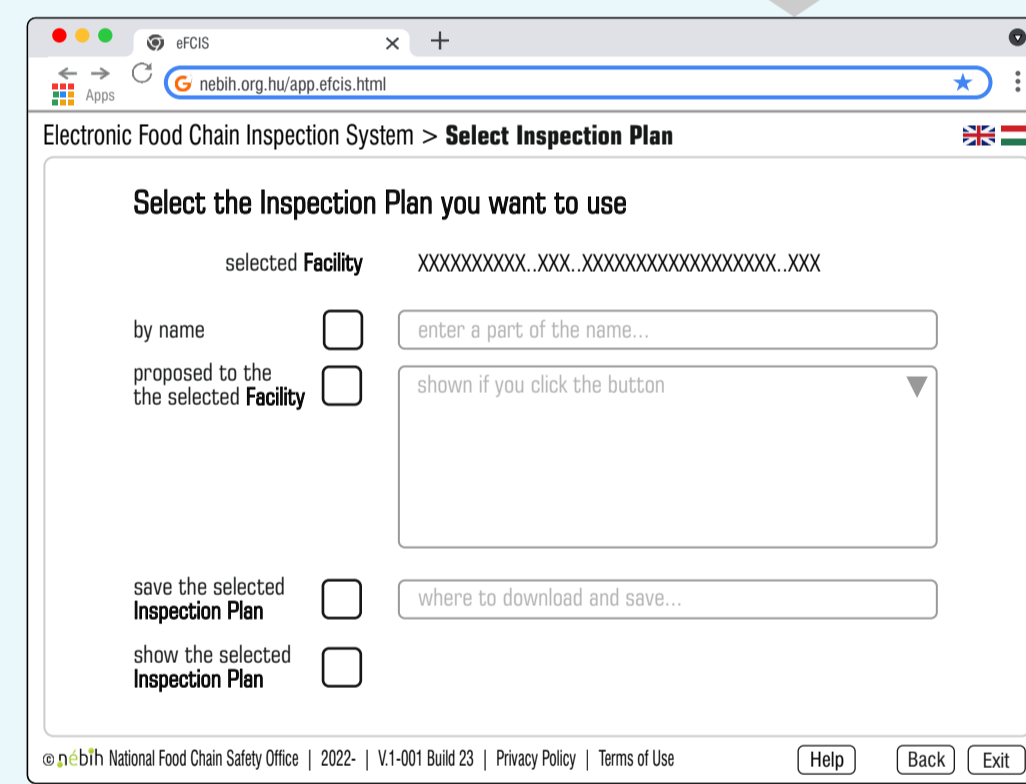
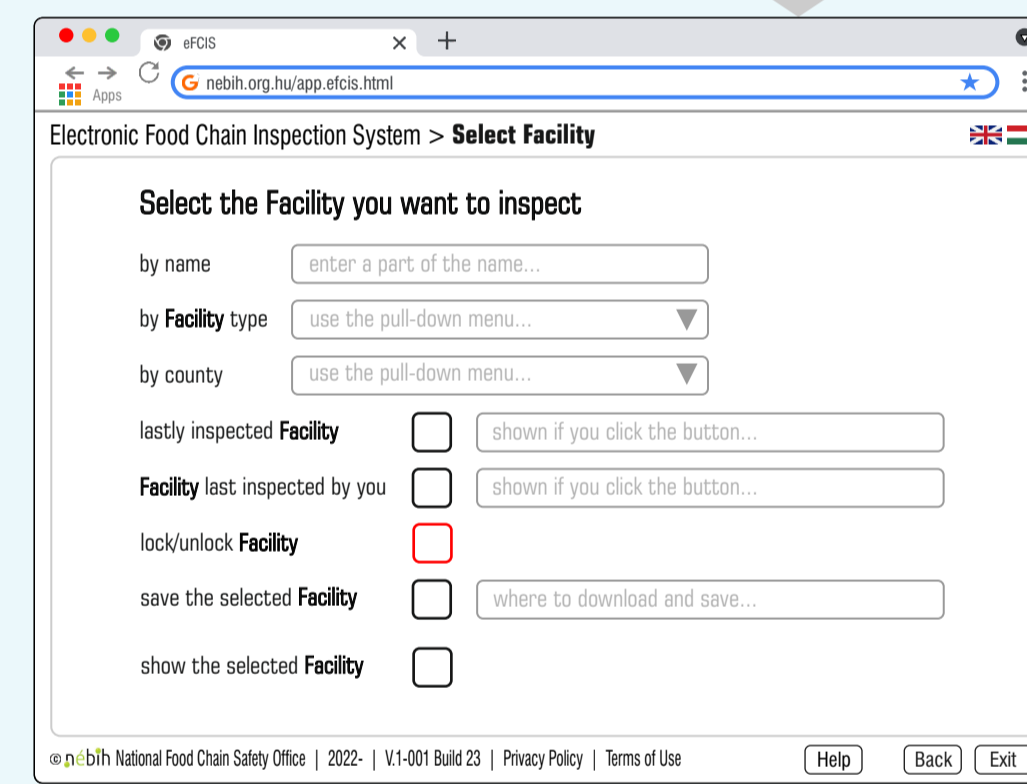
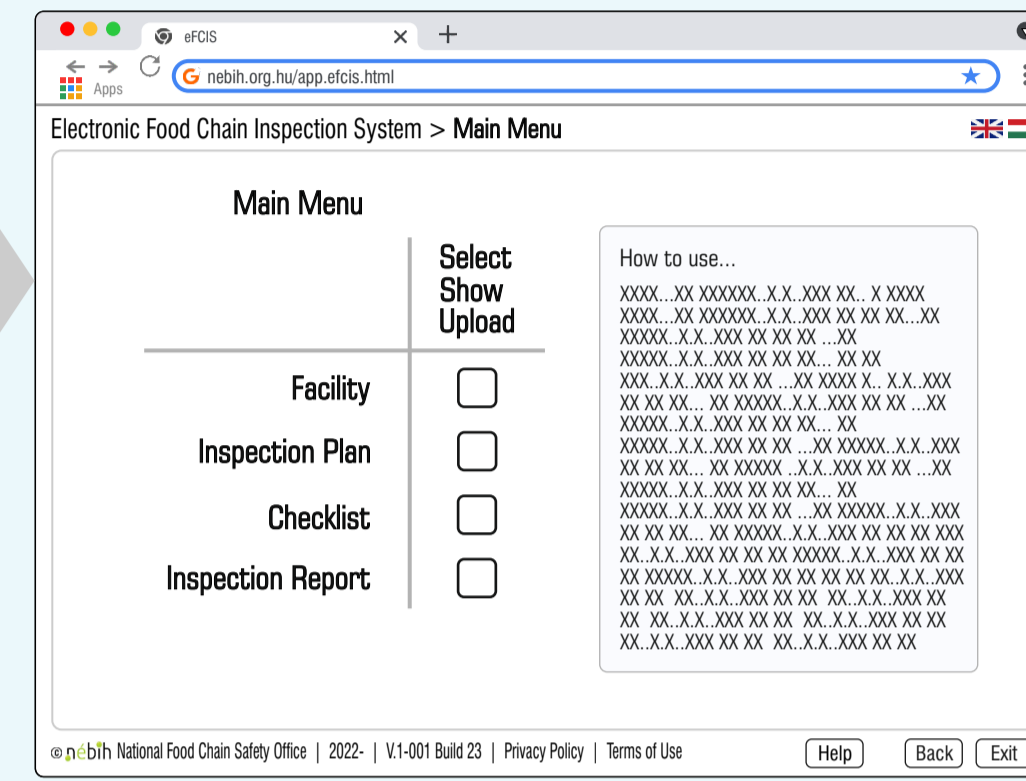
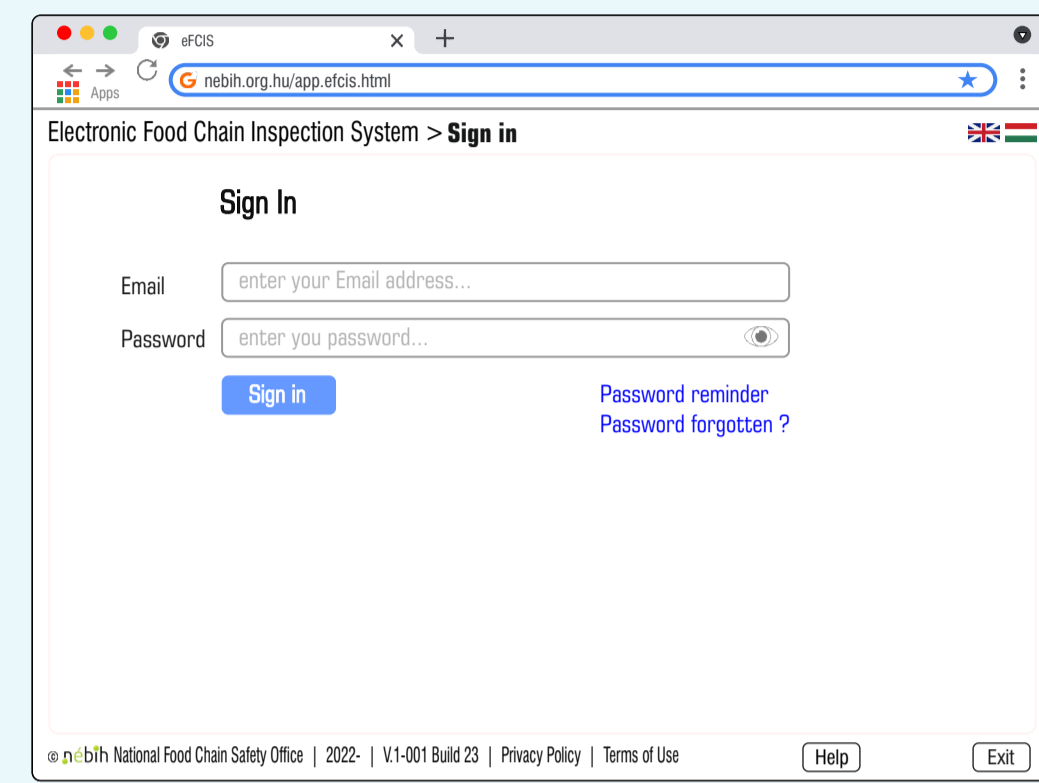
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- Select | Show | Upload
- Select facilities
  - each of them
  - by name
  - by Facility Type
  - by county
  - by city name
  - by last inspected
  - by last inspected by the current user
  - save selected Facility
- Select Inspection Reports
  - each of them
  - each of them from/to
  - by status
  - by status from/to
  - by disposition
  - by disposition from/to
  - last Report by previously selected & saved Facility
  - each Report by previously selected & saved Facility
  - each Report by previously selected & saved Facility from/to
  - save selected Inspection Report
- Select Inspection Plans
  - each of them
  - by Inspection Plan status: unlocked | locked
  - by previously selected & saved Facility
  - save selected Inspection Plan
  - download selected Inspection Plan
  - lock selected Inspection Plan
- Select Checklist
  - by previously selected & saved Inspection Plan
  - download Checklist selected previously
- Show details of selected Report
- Show details of selected Facility
- Show details of selected Inspection Plan
- Show details of selected Checklist
- Upload Inspection Report belonging to the previously selected & saved Inspection Plan

# eFCIS | Electronic Food Chain Inspection System (2)

## System Design

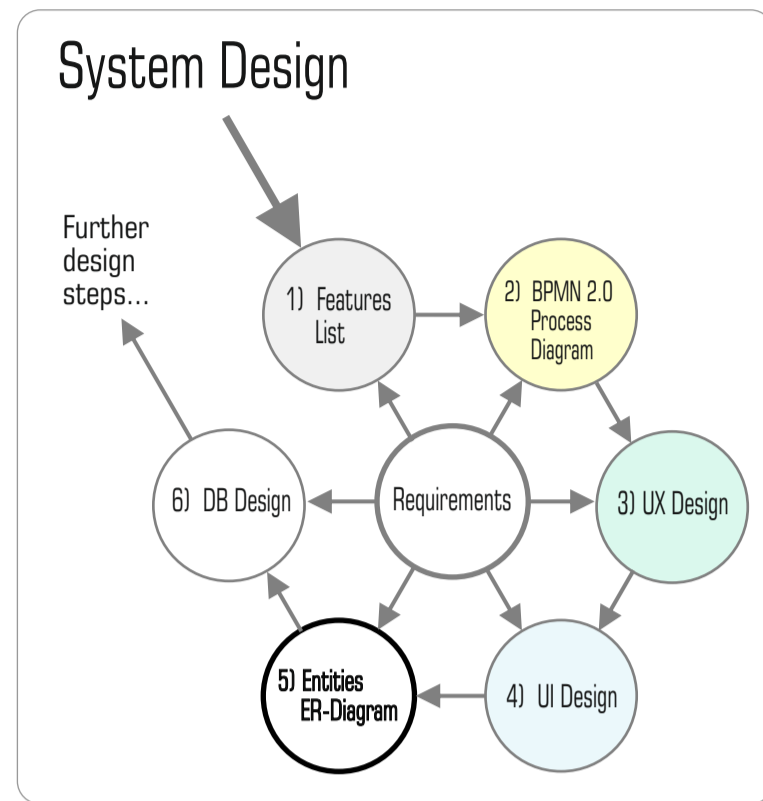


## 4 UI Design



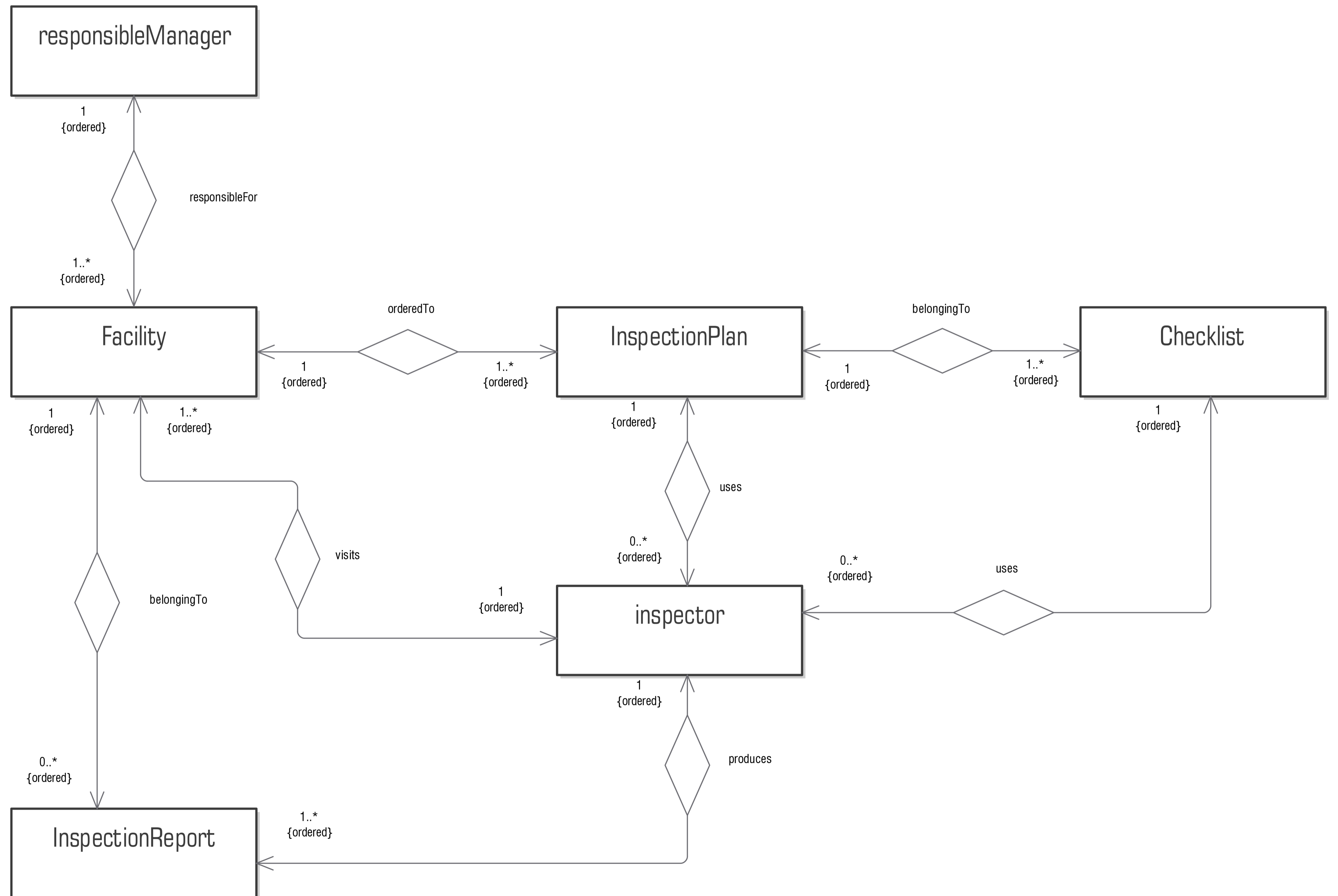
# eFCIS | Electronic Food Chain Inspection System (3)

## 5 Database Design: ERD



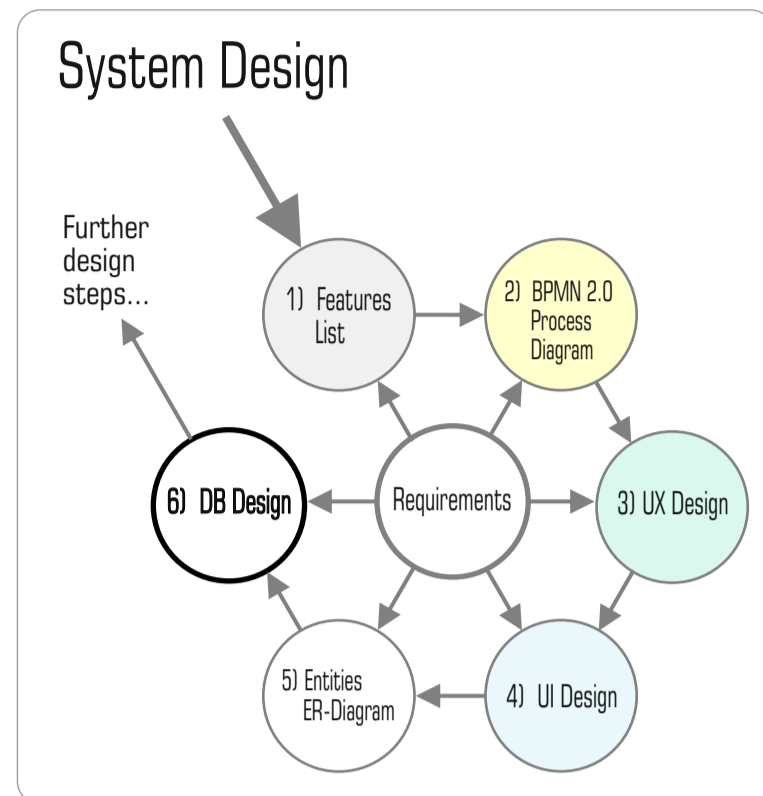
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### eFCIS - electronic Food Chain Inspection System Entity-Relationship Diagram



# eFCIS | Electronic Food Chain Inspection System (4)

## 6 Database Design: Physical Schema



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