

# **A pension system redesign case - limitations and improvements on DEMO**

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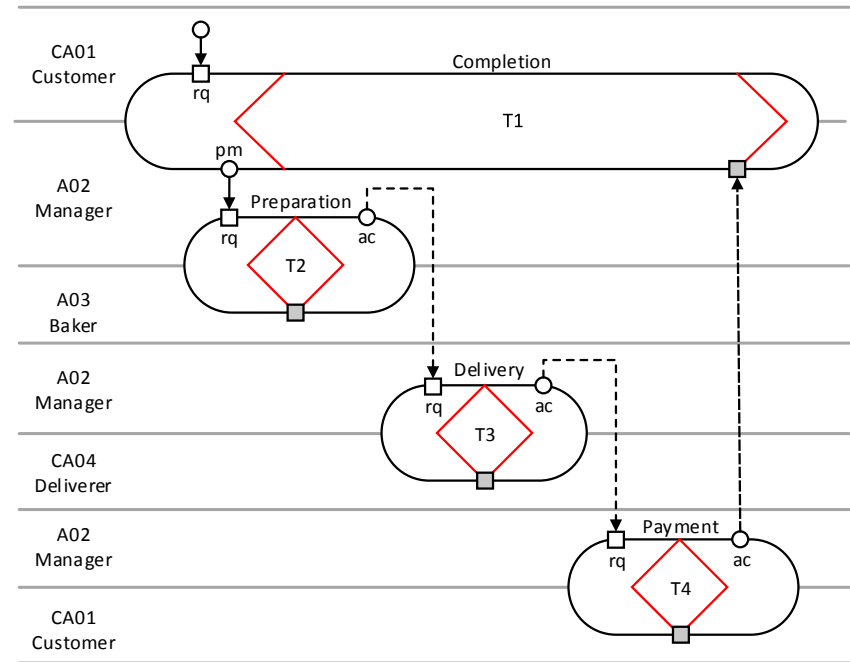
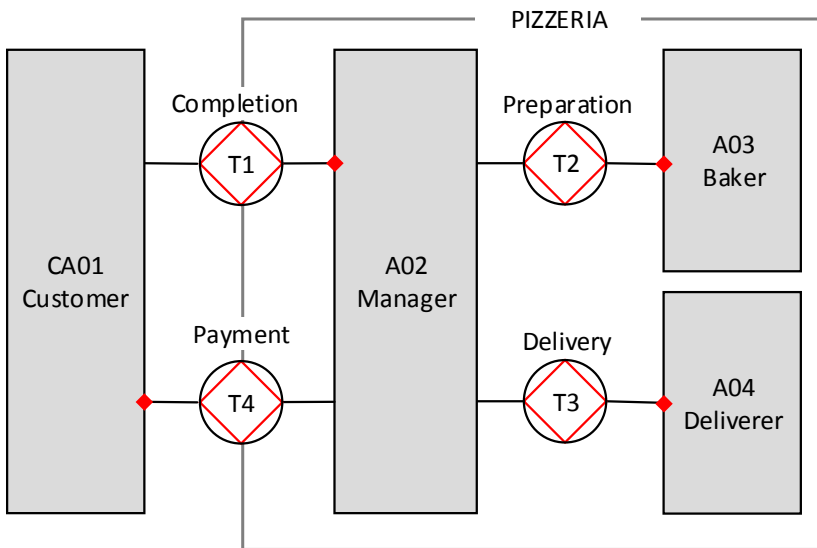
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- Design and Engineering Methodology for Organization (DEMO)
  - effective method for modeling of business process at design level
 

Dietz, J.L.G.: Enterprise Ontology – theory and methodology. Springer, Heidelberg (2006)
  - Focuses on ontological aspects in a business process, neither on datalogical nor inforlogical
  - Simple and intrinsic

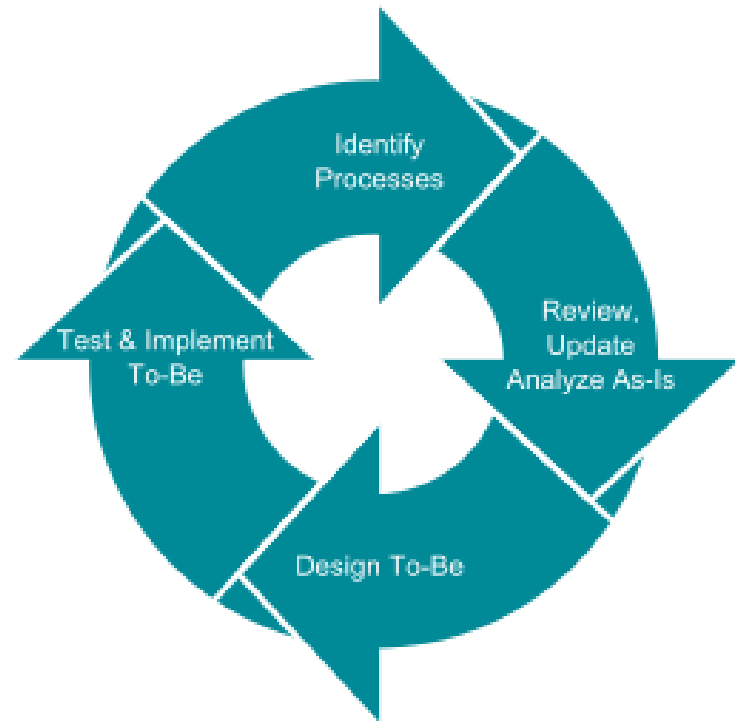
e.g. business process in pizzeria



- Business Process Redesign (BPR) is necessary for organizations
  - to improve service quality, cut the cost and reduce time.

- BPR cycle

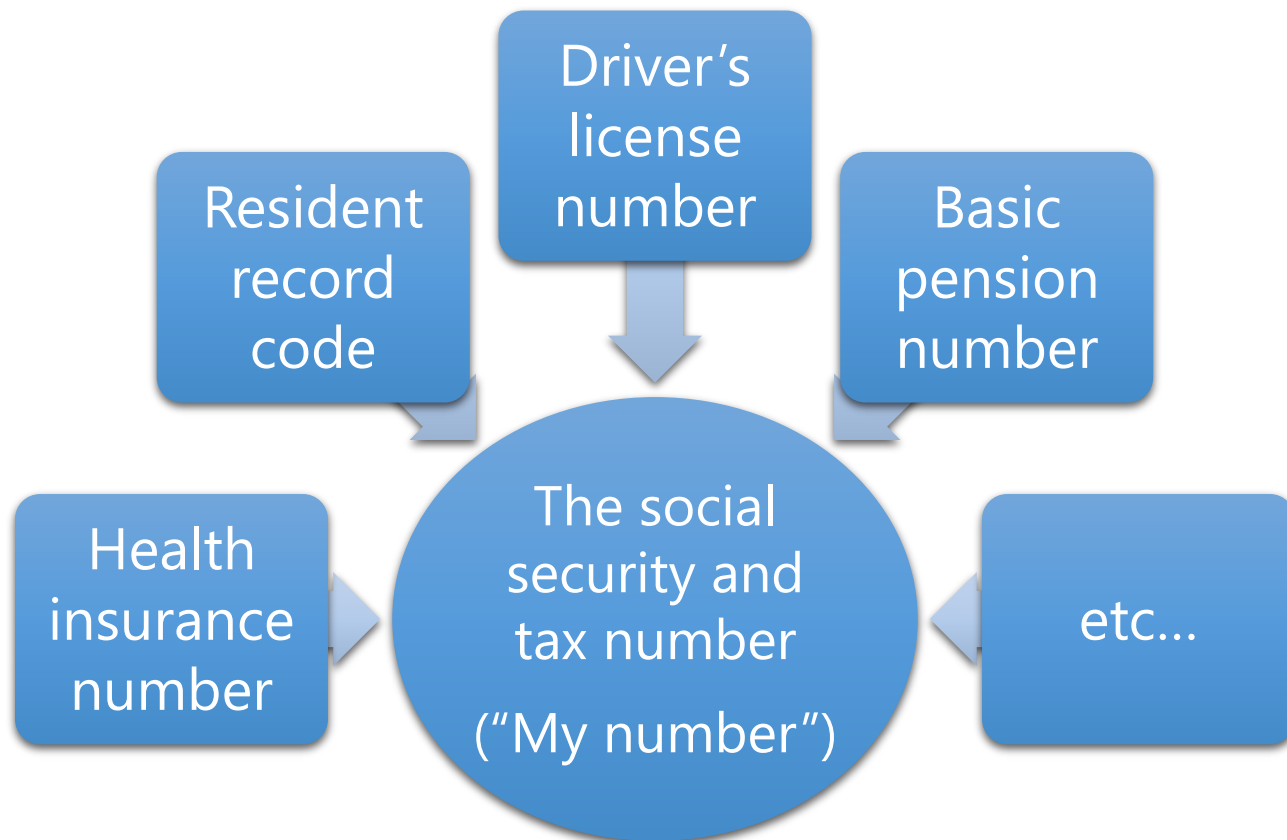
1. Identify process
2. Analyze As-Is
3. Design To-Be
4. Test & implement To-Be



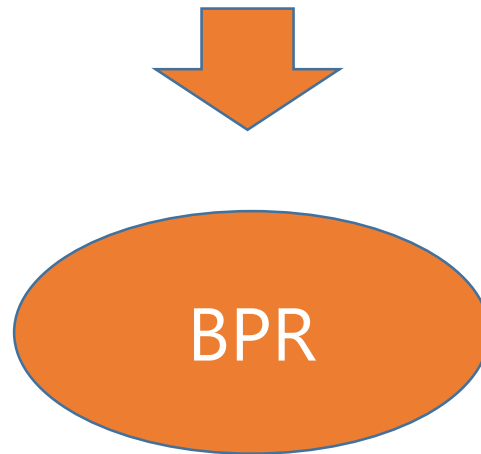
Business Process Reengineering Cycle

Gene L. Dodaro, Brian P. Crowley: Business Process Reengineering Assessment Guide  
Image from Wikipedia

- The government of Japan is going to introduce social security and tax number system ("My number").
  - For taxation, social security, national health care, ...

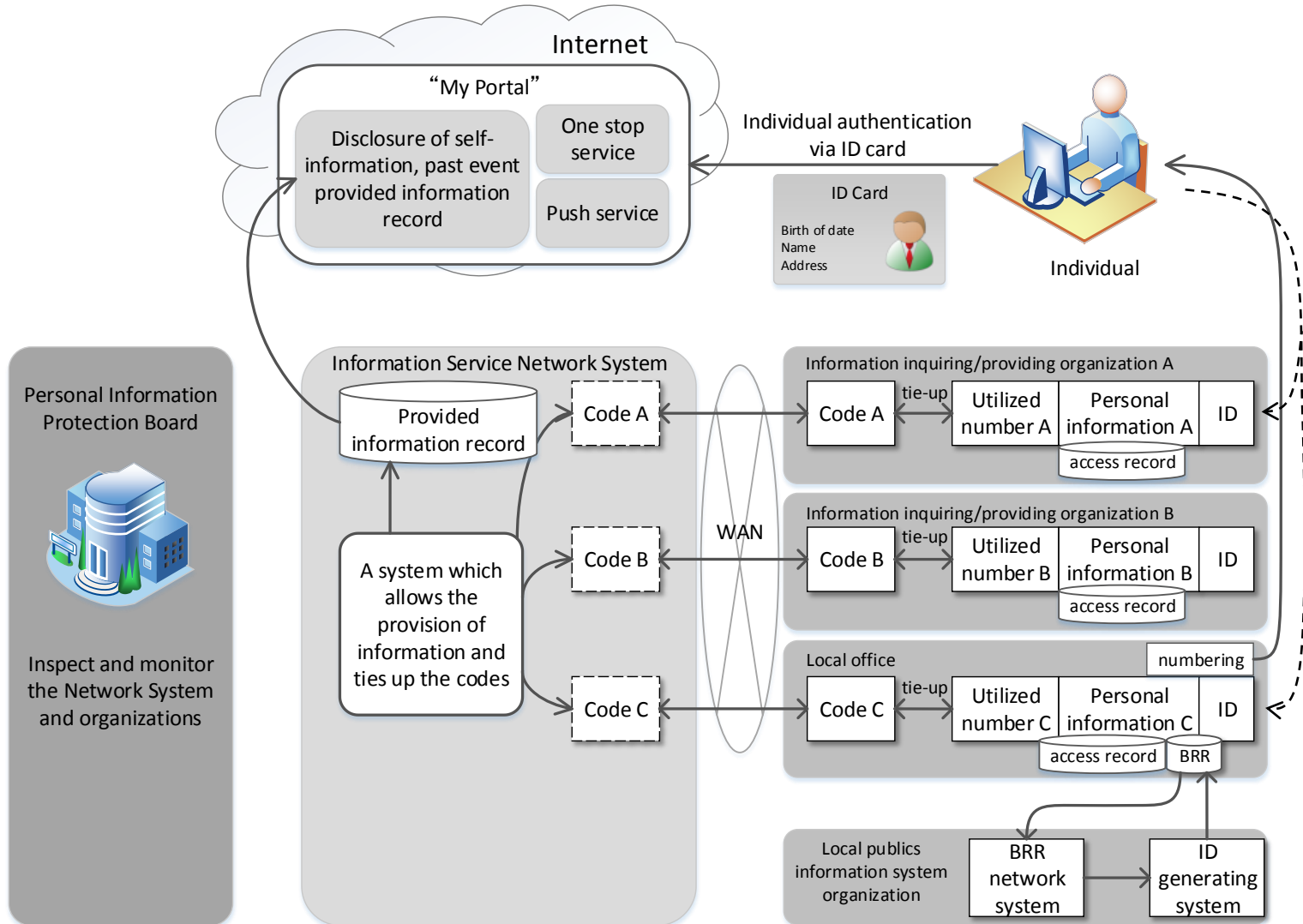


- Problems in Pension Service
  - Many pension records had been missed because of human error.
  - Too much cost and time is allotted for business losses.



# Information providing network system

- Information providing network system is about to start.



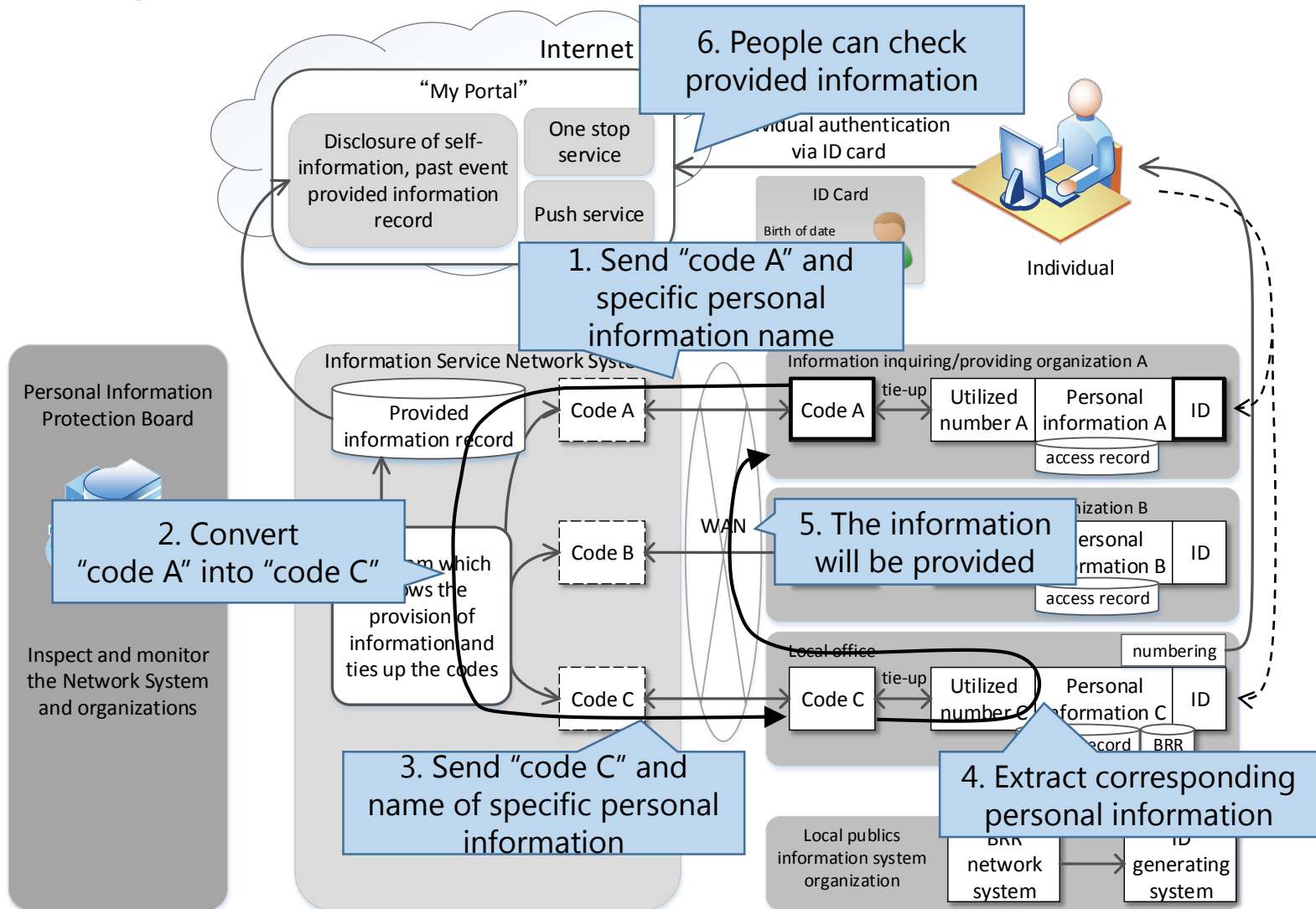
Personal Information Protection Board

Inspect and monitor the Network System and organizations

\*BRR: Basic Resident Register

# Information providing network system

- When Organization A needs Personal Information C,



\*BRR: Basic Resident Register

The business process should be redesigned by the introduction of My number and Information providing network system.

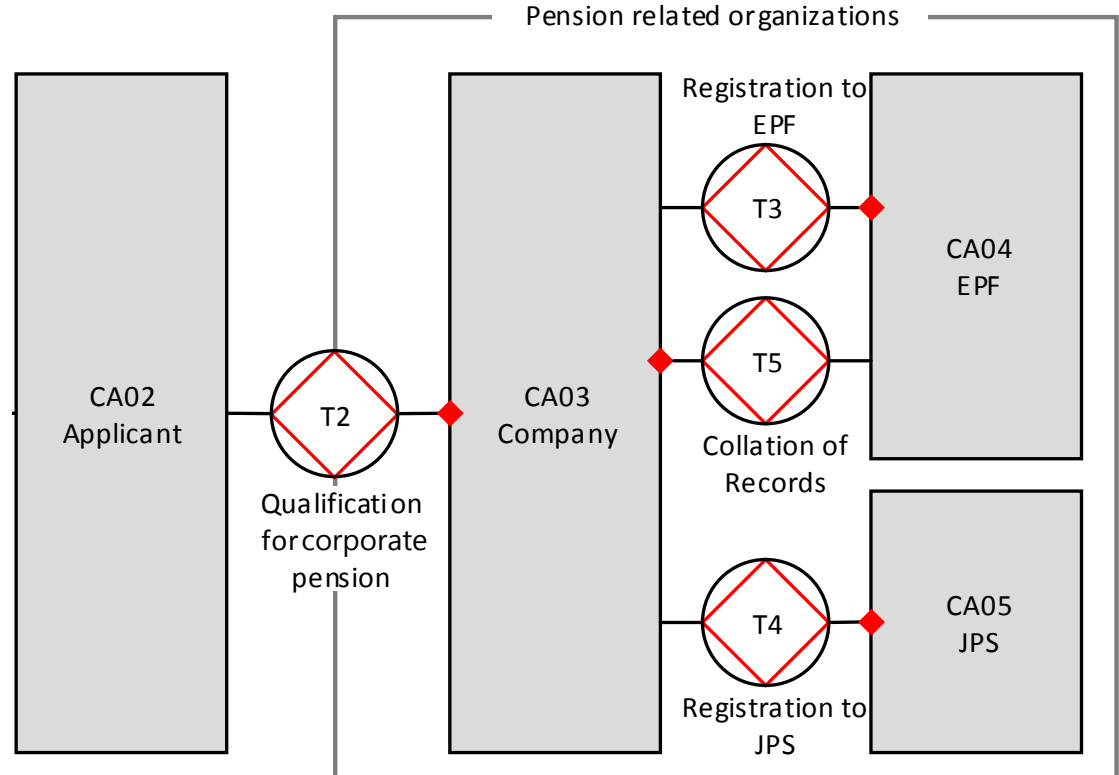
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RQ: Is the current notation of DEMO enough for redesign?

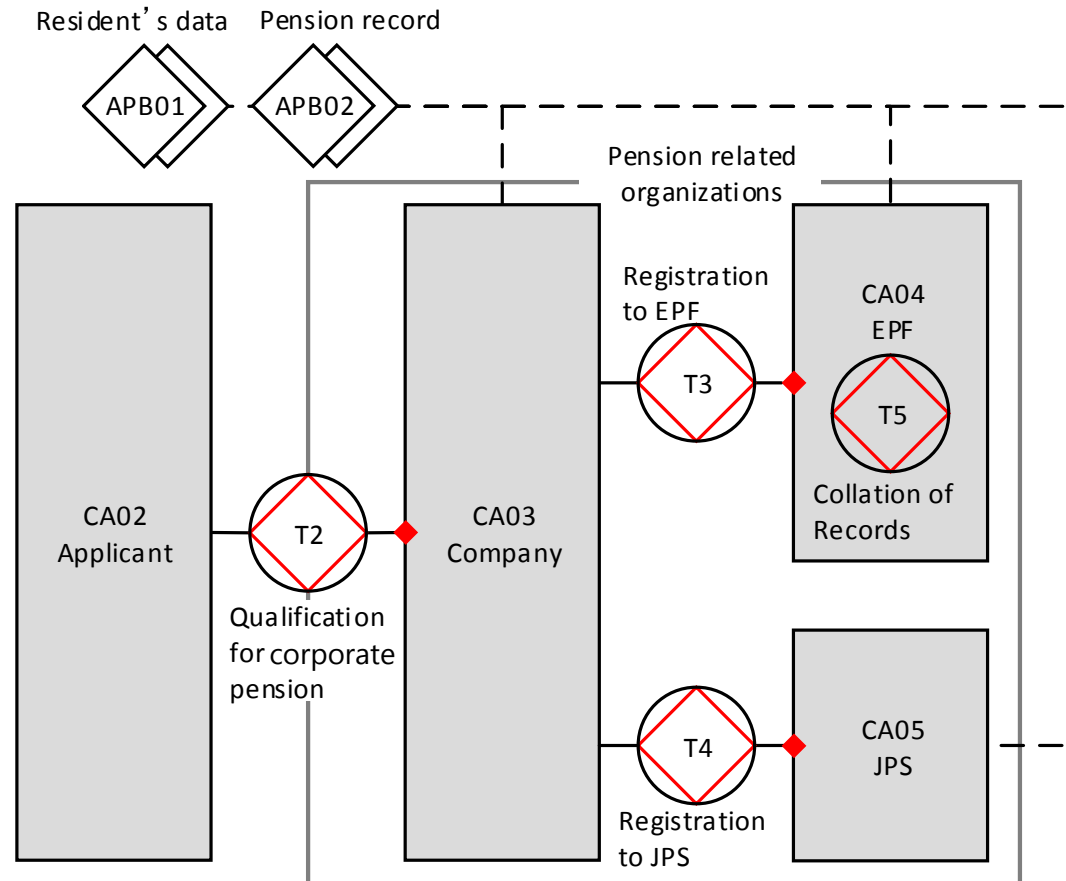
A. No. Some new components are needed.

1. Analyze As-Is business process in **corporate pension plan** (36 business processes)
2. Establish As-Is and To-Be DEMO model
  - To-Be model: the ideal business process model after the introduction of My Number
- These researches were done through cooperation of *Institute of strategic solutions for pension management* and *CAC corporation* from May 2013.
3. Clarify limitations in current notation of DEMO to be addressed.
4. Propose new components to be drawn in DEMO models.

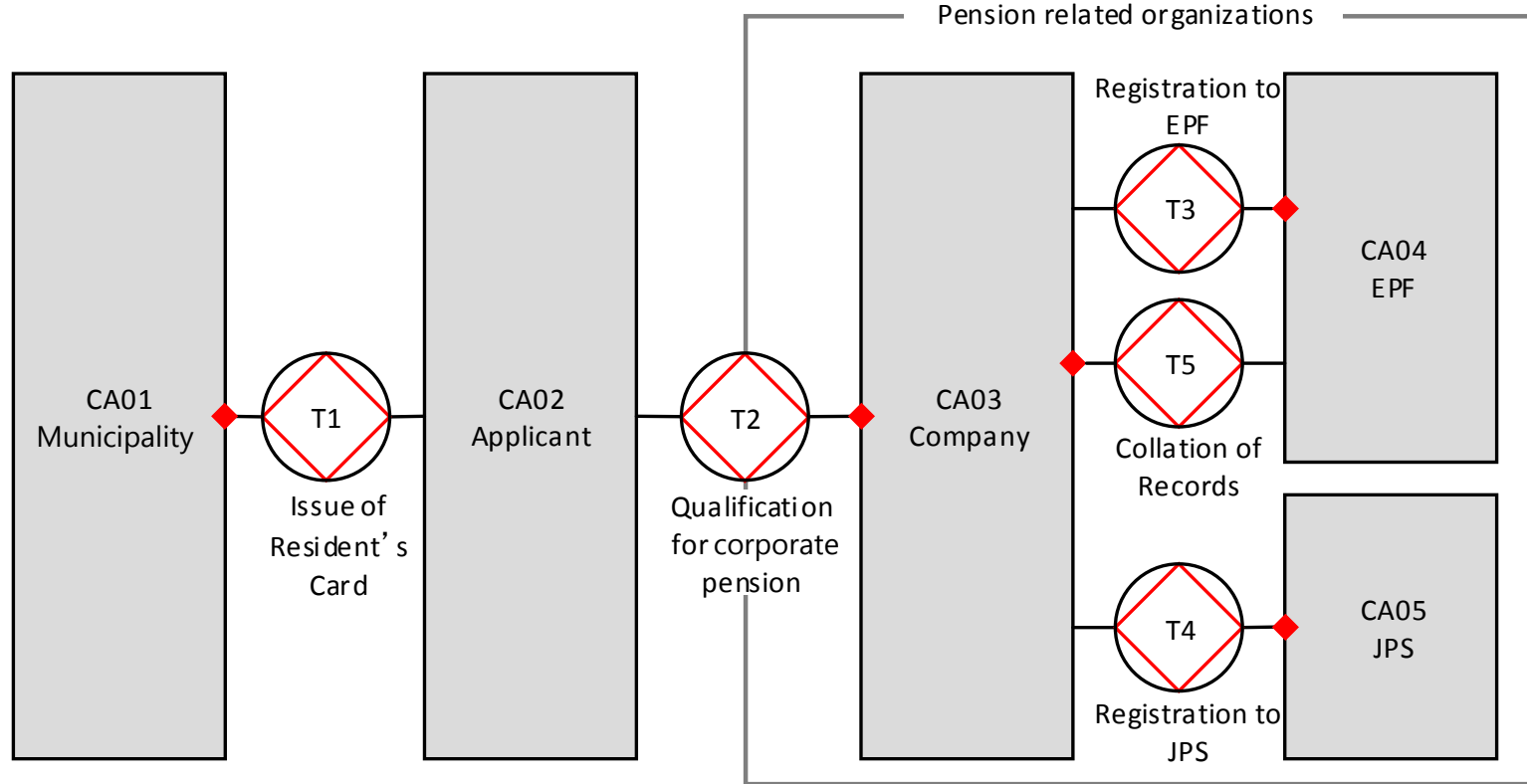
EPF: Employee Pension Fund  
JPS: Japan Pension Service



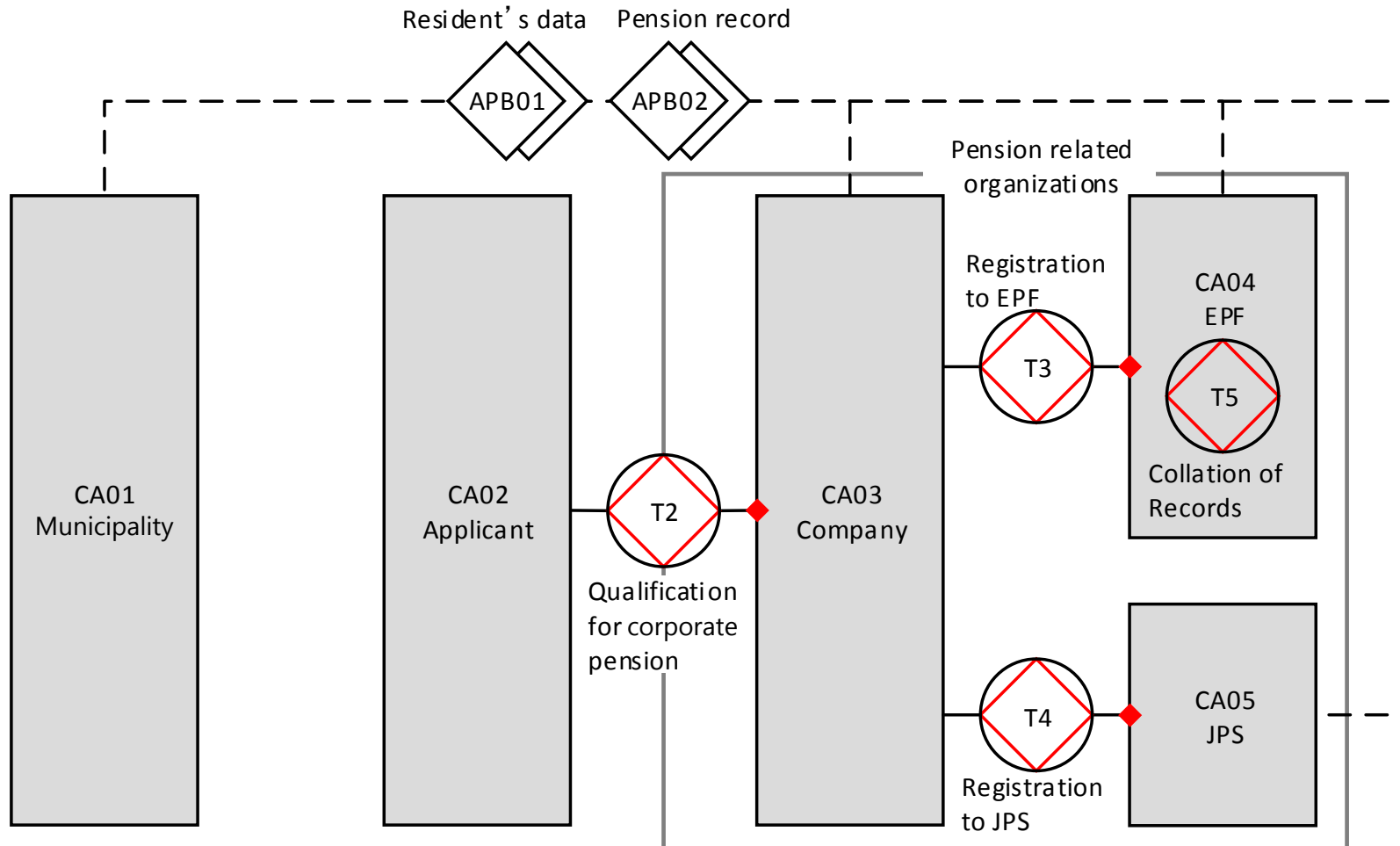
1. Applicant applies for the qualification for corporate pension (T2)
2. The company makes a registration document and request EPF and JPS to make an entry in registration book (T3, T4)
3. EPF requires the company to collate the records from EPF and JPS (T5)



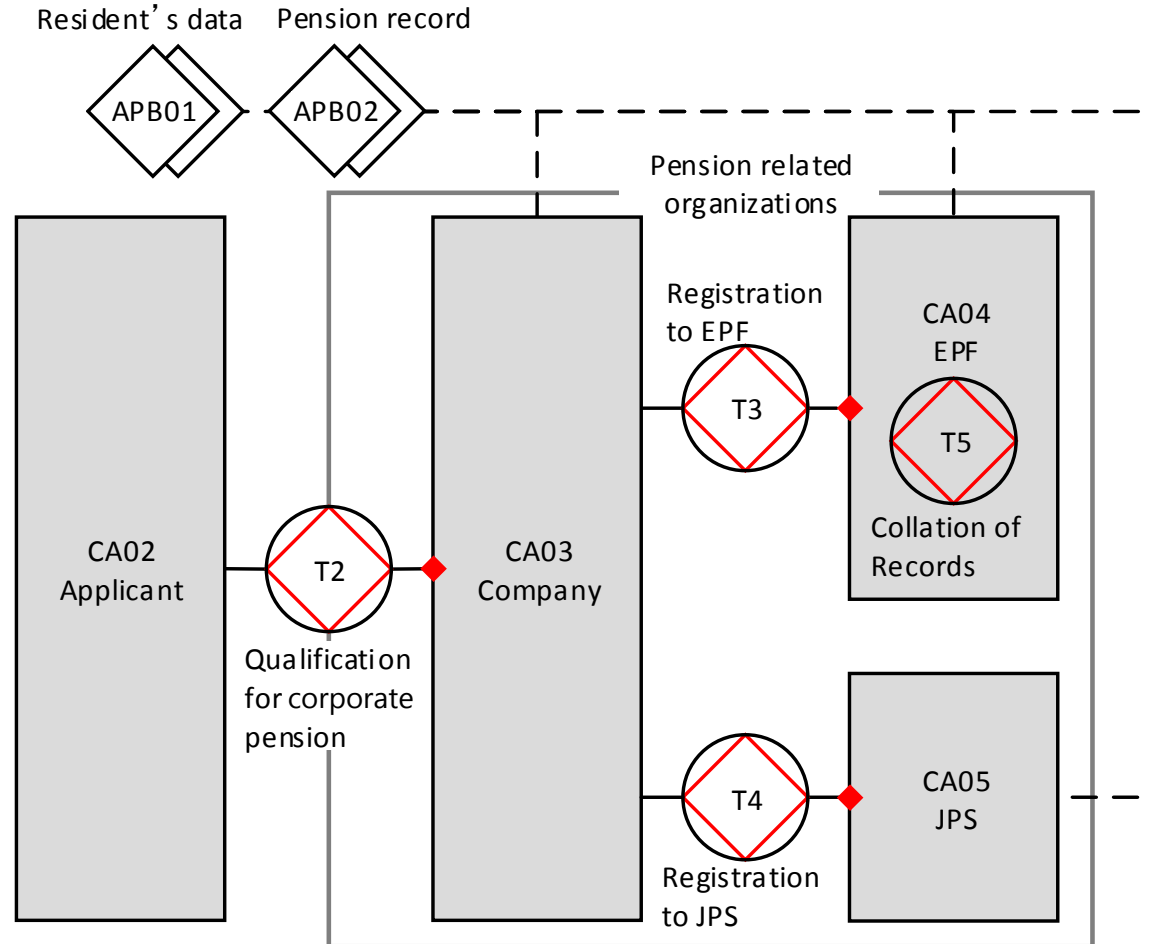
- T5 became "self-activated transaction".
- Not large difference between As-Is and To-Be?



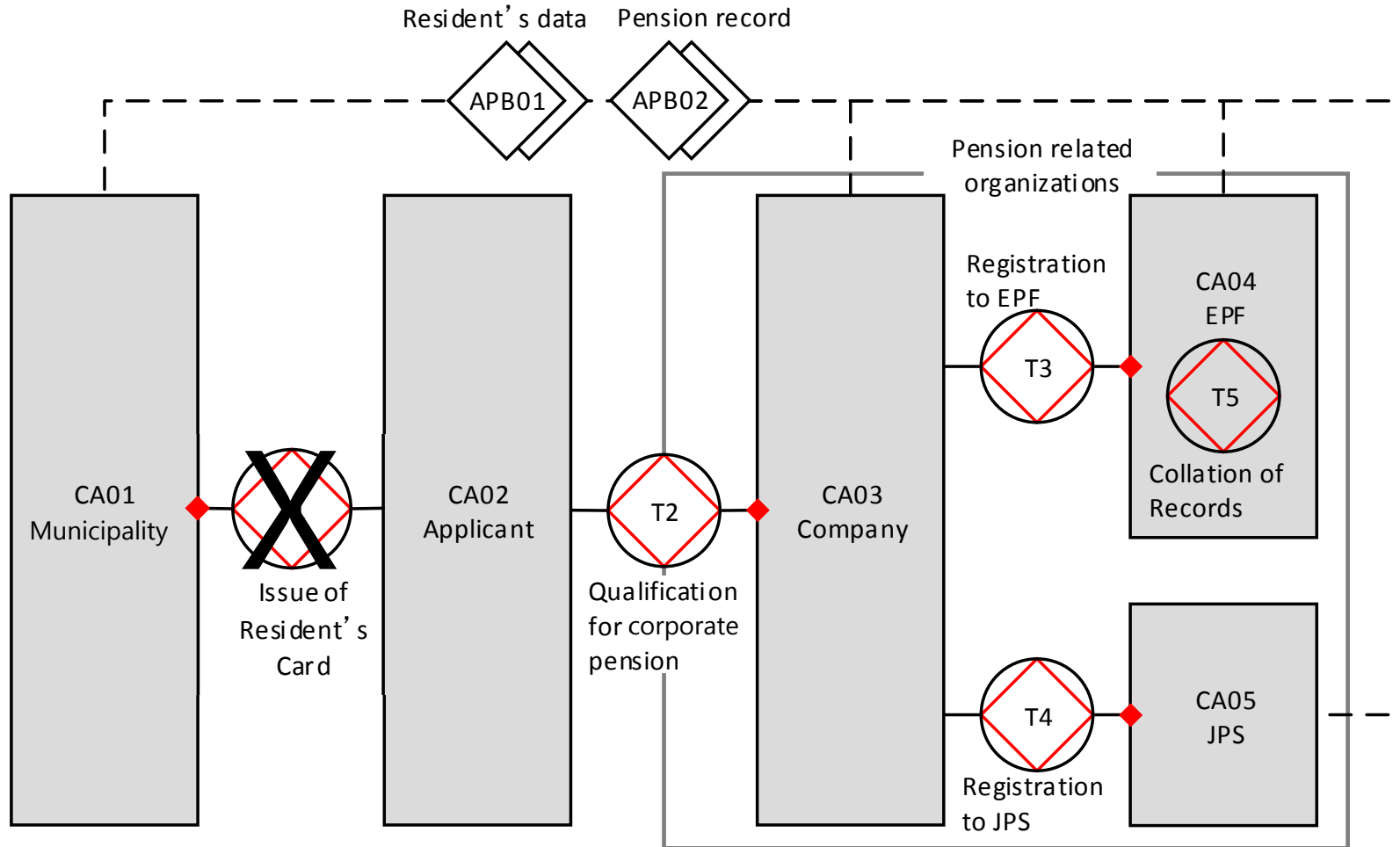
Each applicant should ask the issue of resident's card for municipality.



- T1 no longer exist.
- CA01 is now "alone" actor role.

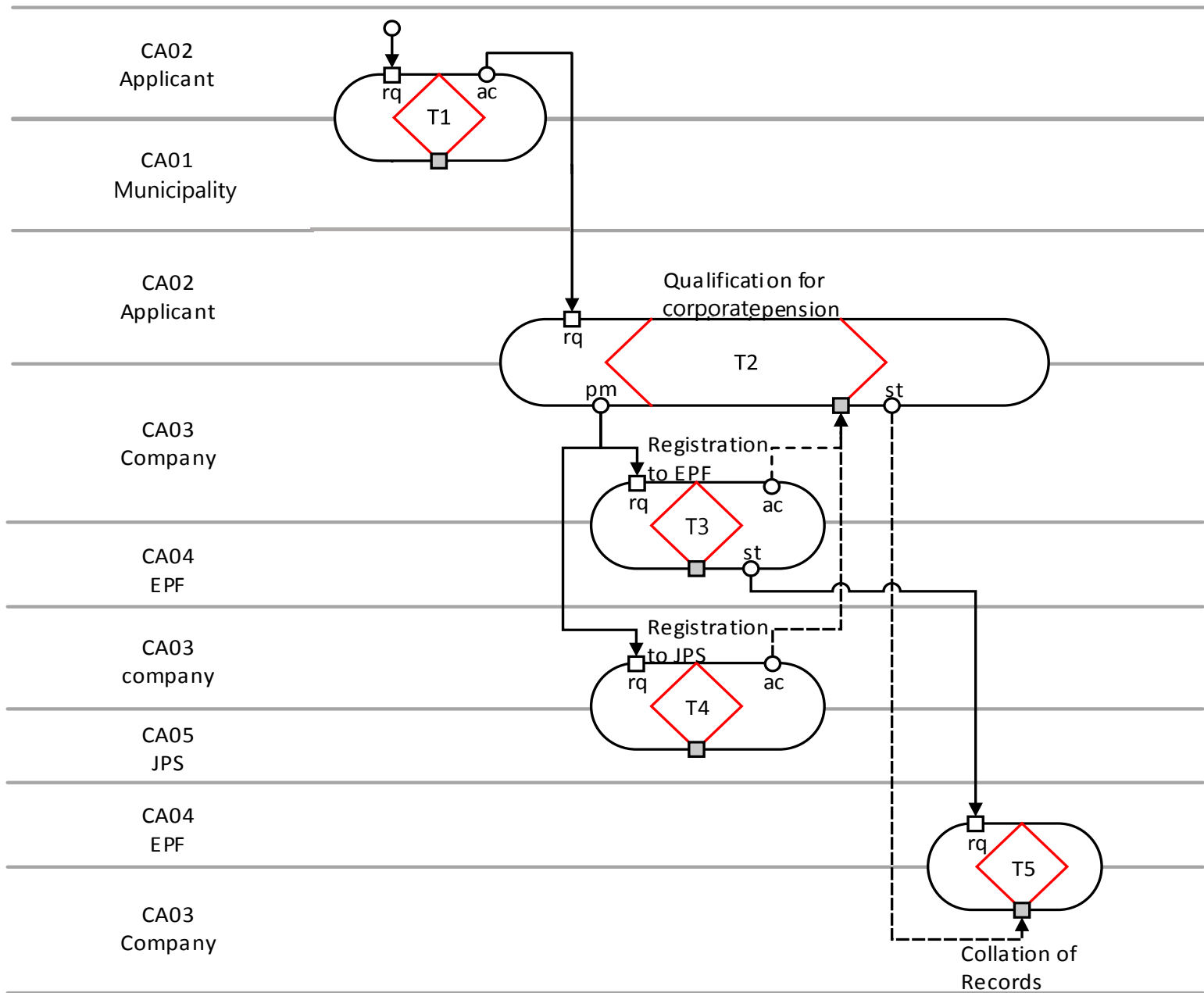


- T1 no longer exist? or just ignored because it is an external transaction?

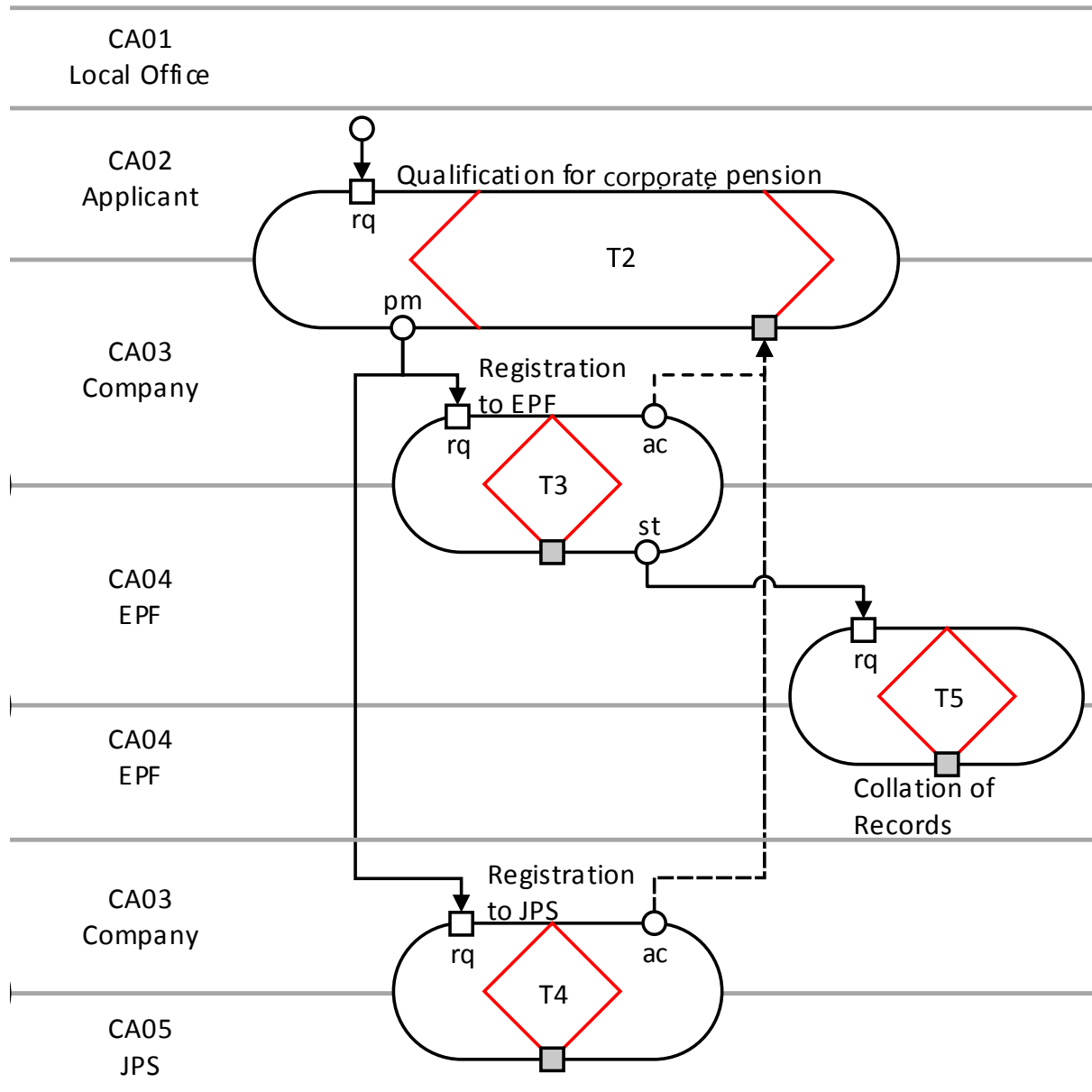


- T1 no longer exist.
- CA01 is now "alone" actor role.

# As-Is PM -acquisition of a qualification for corporate pension

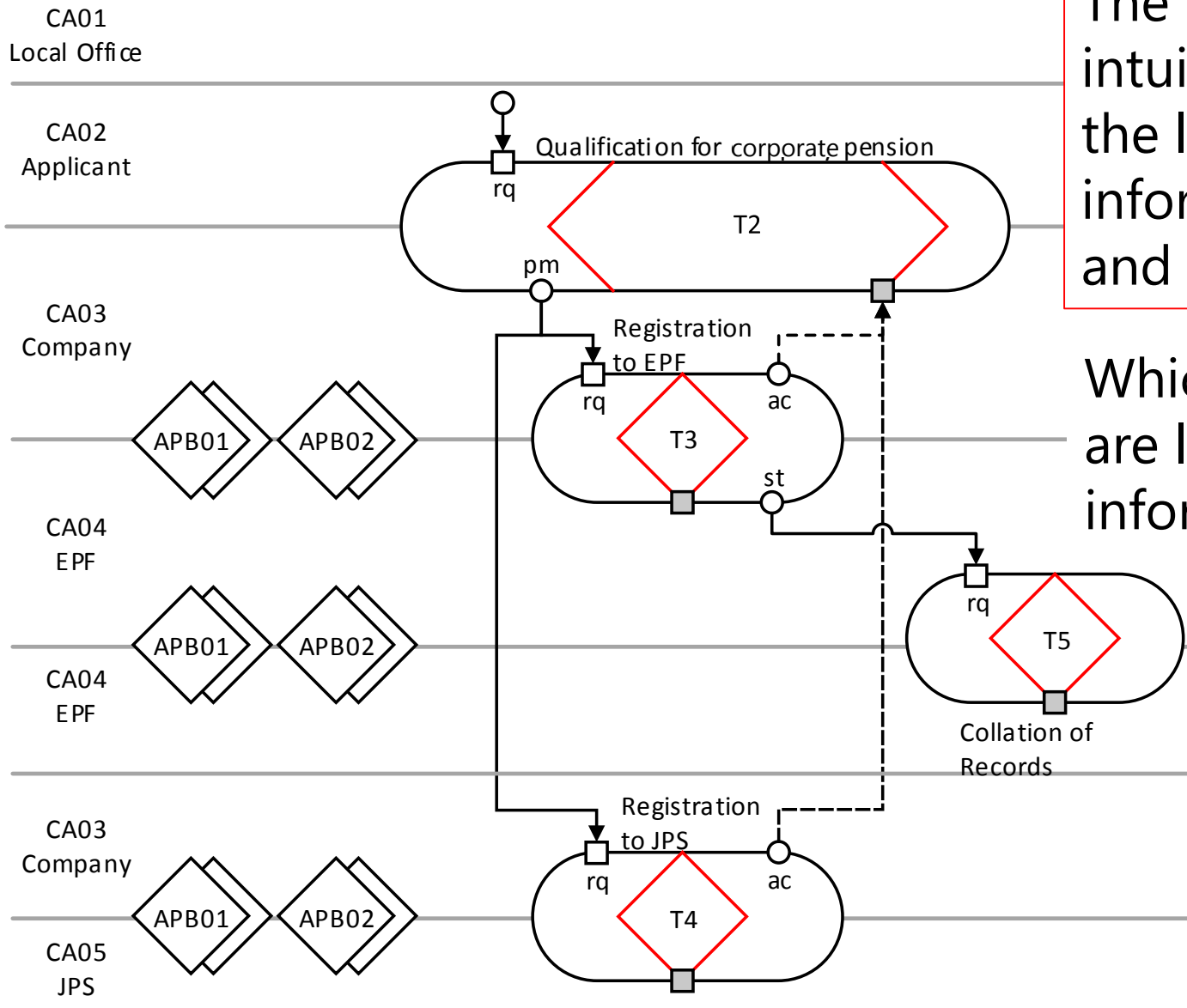


# To-Be PM -acquisition of a qualification for corporate pension



Which transactions are linked with the information banks?

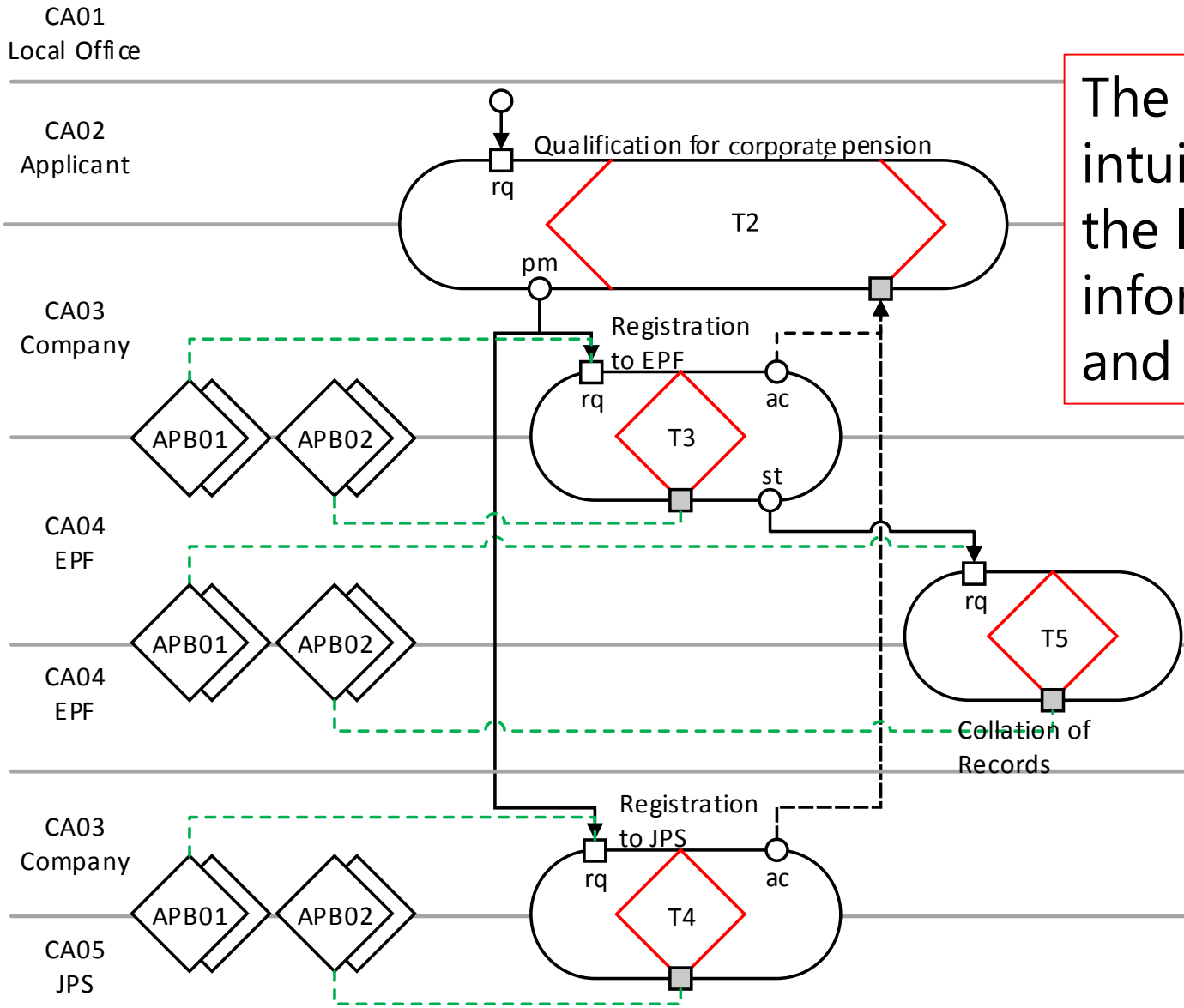
# Proposed notation for the PM



The proposed way intuitively describes the link between the information banks and transactions.

Which process steps are linked with the information banks?

# Newly proposed notation for the PM



The proposed way intuitively describes the link between the information banks and process steps.

For the case of business process redesign,

- An external actor role and transaction sometimes need to be drawn in order to clarify the change of the model.
- An “alone” actor role needs to be drawn.
- Current DEMO’s notation does not allow to describe the role of information bank in the PM. The proposed way successfully expresses which information bank are linked with transactions and also with the process steps.
- The proposed way of notation can also clearly show which actors are active or inactive and which transactions will be reduced by the redesign.