



How ICT contributes to the rehabilitation of offenders

A case study of the Danish & Swedish Prison and Probation Service

Agenda

- A brief introduction to the danish & swedish prison and probation service
- The Offender in direct contact with ICT and how this prepares the release
- The indirect use of ICT in preparation of the release
- The prospects of tomorrow

A little bit about who we are

- Fredrik Wilhelmsson
 - Studied law at University of Lund
 - Worked for SPPS since 1991
 - Currently Head of operational security
- Dan Thunø Iversen
 - Studied law at University of Copenhagen
 - Formerly in charge of the legality of practice and decisions two prisons
 - Currently employed in the ICT departement as head of section for our team of system managers

THE DANISH & THE SWEDISH PRISON AND PROBATION SERVICE

A BRIEF INTRODUCTION

Denmark



- 43,098 square kilometres
- 5.7 million inhabitants
- Social security
- 98 municipalities
- Homogeneous and highly digitized society

Example of public self-service

The screenshot shows the homepage of <https://lifeindenmark.borger.dk/>. The browser window includes a search bar with the text "Search in lifeindenmark.dk" and a "Log in" button. The main content area features three large cards: "Coming to Denmark", "Living in Denmark", and "Leaving Denmark". Each card has a brief description and a relevant image. Below these cards, there are two sections: "Online self-service" with links to various services like NemID and holiday allowances, and "Welcome to Denmark!" with a message about the website's purpose. At the bottom, there is a section titled "All subjects" with four columns: "Coming to Denmark", "Living in Denmark", "Leaving Denmark", and "Cross borders", each containing a list of topics and links.

lifein denmark.dk

Digital Post

Log in

Search in lifeindenmark.dk

Coming to Denmark

If you are coming to Denmark you will have to address practical issues. You can start here.

Living in Denmark

This is a guide to some of the practical things you need to know when living in Denmark.

Leaving Denmark

Before leaving Denmark there are relevant things you need to address - you can look it up here.

Online self-service

- > [NemID self-service](#)
- > [View your holiday allowance](#)
- > [Contributions to ATP Livslang Pension](#)
- > [Notification of change of address](#)
- > [Claim your holiday allowance](#)
- > [Order a new health insurance card](#)

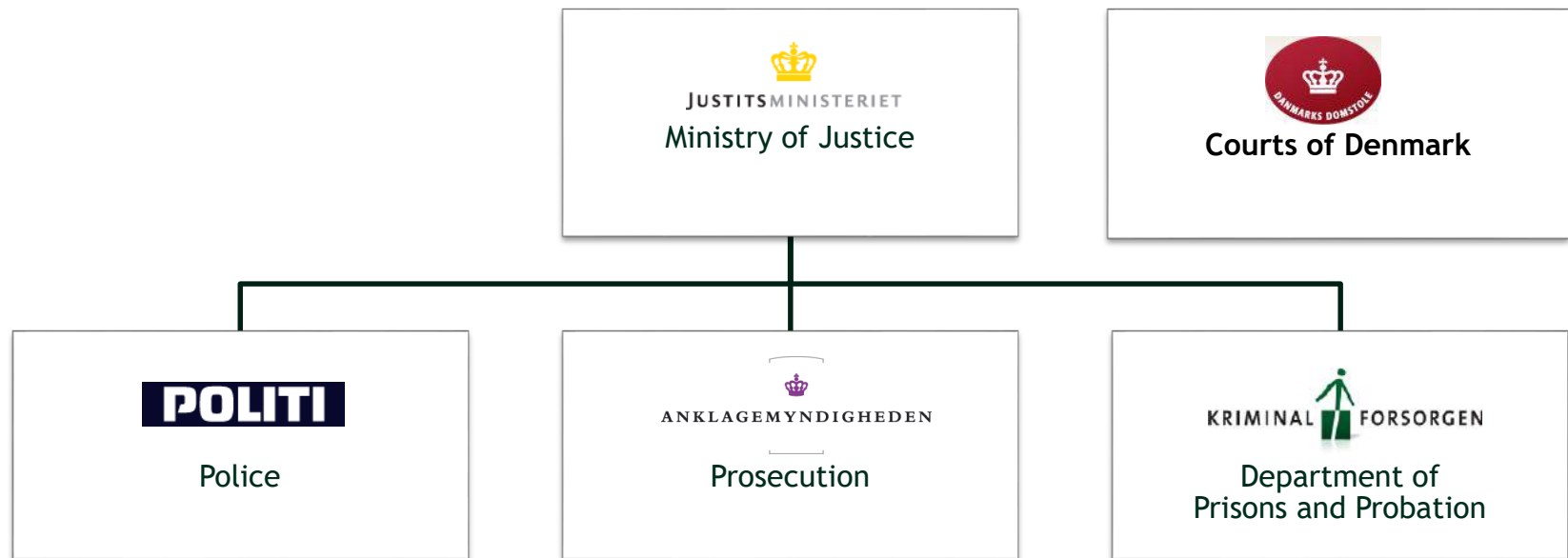
Welcome to Denmark!

Lifeindenmark.dk is a practical guide relevant to your stay in Denmark - whether you are here to work or study. We hope you will have a rewarding stay in Denmark.

All subjects

<u>Coming to Denmark</u>	<u>Living in Denmark</u>	<u>Leaving Denmark</u>	<u>Cross borders</u>
> Basis for residence in Denmark	> Holiday allowance	> Practical matters before leaving	> Cross-border commuters
> Family and children	> Culture and association activities	> More ...	> Border controls when entering Sweden
> NemID	> Your residence		> More ...
> More ...	> More ...		

The penitentiary system



A day in the Danish Prison and Probation Service

60 inmates pr. 100.000 inhabitants

12 open and closed prisons
900 inmates in closed prisons
1100 inmates in open prisons

36 local remand prisons
1200 inmates

319 inmates in curfew detention

7 halfway houses
170 inhabitants

13 probation service centres
8.500 in supervision





Sweden

- Length 2000 km (3200 mi)
- Area 450 km² (Ireland 70 km²)
- Population 9.6 million

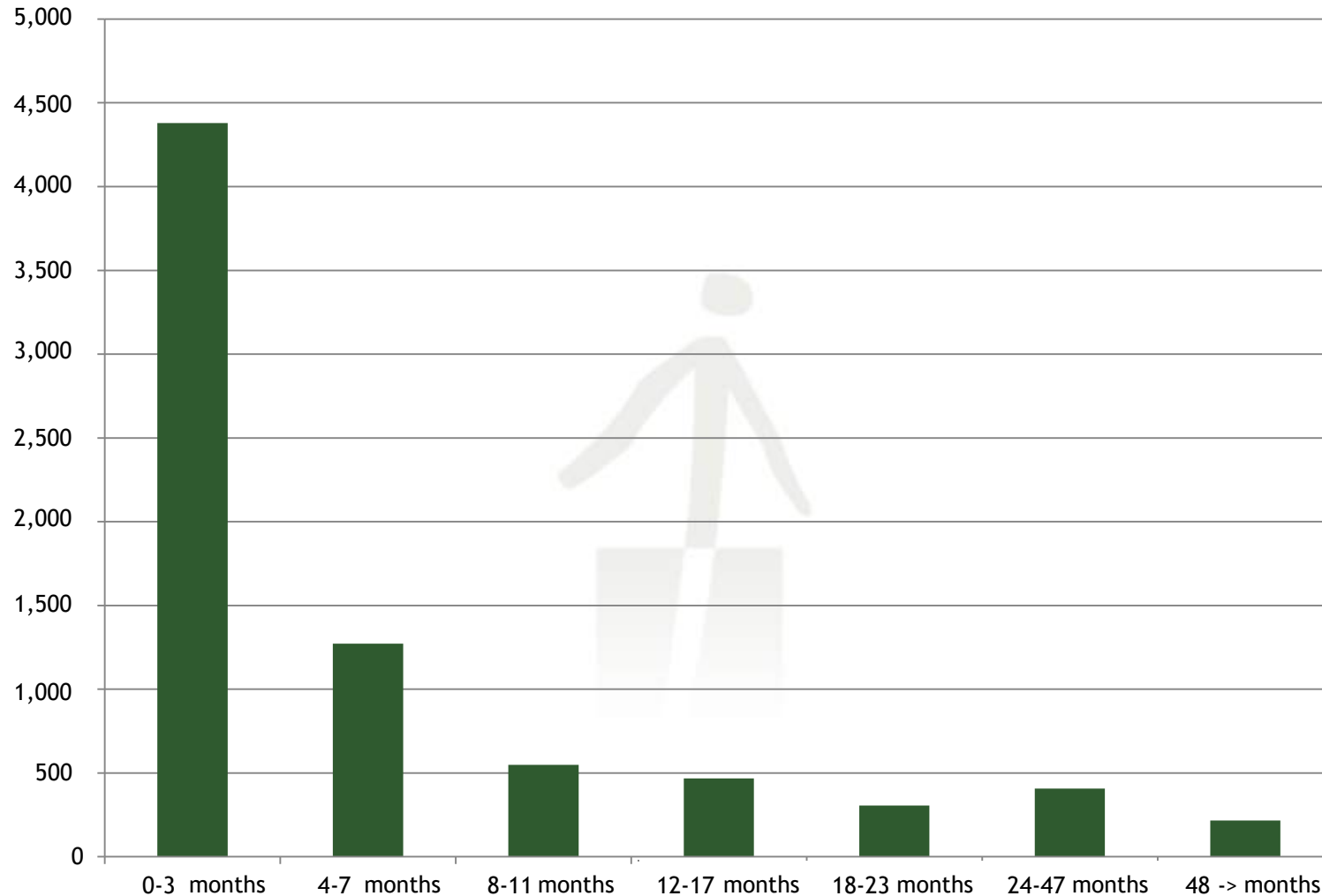
SPPS

- Prisons
 - Class 1 (7, 3 very high security)
 - Class 2 (29)
 - Class 3 (23)
- Custodys
 - Security (4)
 - Main (35)
- Probation offices (34)

Population:

- Prison 4000
- Custody 1700
- Probation 10 000
- Electronic monitoring 300

Prison sentences by length (2016)



Programme of Principles

Our mission is to contribute to reducing criminality

Control and security *and* support and motivation

- Normalisation
- Openness
- Responsibility
- Security
- Least possible intervention
- Optimum use of resources



The art of balancing
a strict and a soft approach

Characteristics

- Prison as a last resort
- Short prison sentences
- Many alternative measures
- Focus on rehabilitation



Daily life in prison

Work - Education - Treatment programmes - leisure time



Liberties under responsibility



Self service including catering

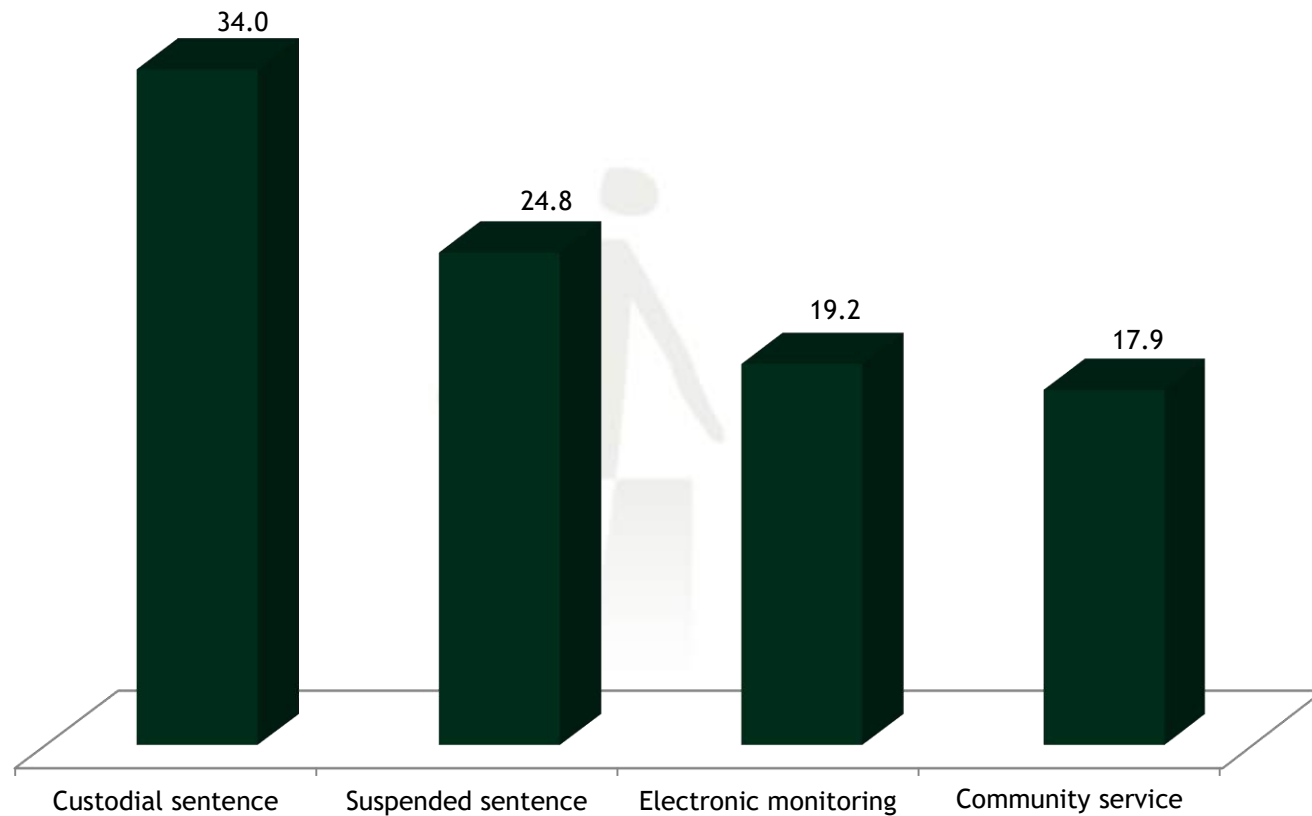


Treatment and rehabilitation in general

- Individual sentence plans based on RNR-principles
- Treatment guarantee
- Approximately 50 treatment programmes
- Good release scheme



Recidivism rates (2016)



THE OFFENDER IN DIRECT CONTACT WITH ICT

AND HOW THIS PREPARES HIM FOR RELEASE

Computer access in closed facilities

- For educational purposes inmates in closed facilities can gain computer access in a physically and technically protected environment
- The "SK-Net" was introduced in 2010
- Consists of a number of thin clients in metal cases
- Citrix-based platform with a Windows 2008 R2 frontend desktop,
 - limited office, mind-map, math, dyslexia
- Portal that supports distance learning
- Whitelist-based access to the internet
- For educational or employment reasons, inmates can be allowed a computer on the cell without internet access

Computer access in open facilities

- Access to computers for inmates attending the the prison school
- In most facilities computer acces will be possible in a computer café at leisure time
- Pass-word protected access and login of the activities
- For educational or employment reasons inmates can be allowed a computer on the cell with or without internet access
- During leave inmates will have unrestricted access to computers and cell phones

Access to communication

- In open facilities
 - A fixed mobile phone in the cells provides unlimited and unsupervised access to calls during leisure time
- In closed facilities
 - A white list based access to calls
 - Recordings of the inmates telling bedside stories for their children

Pilot on a self-service solution

- Pilot of "KIOSK" was initiated in 2014
- On the cell access to a interface allowing
 - E-commerce regarding groceries
 - FAQ, House rules and the legal framework
 - Digitized requests regarding healthcare, curch, hairdresser, account information, complaints etc
 - Local newsfeed
- Access via smashboxes and HTC tablets on the cells

Electronic monitoring

- Sentences of up to 6 months can be served under a home curfew detention scheme
- The home curfew detention is also used as a rehabilitation tool after serving a long time sentence or where the presence of the offender in the home is deemed necessary due to family or occupational reasons
- GPS-tagging of certain inmates during leave

History

2003 - IT system for inmates introduced by SPPS

2007 - Learning management system included

2013 - Initiating work to define possible benefits from InIT

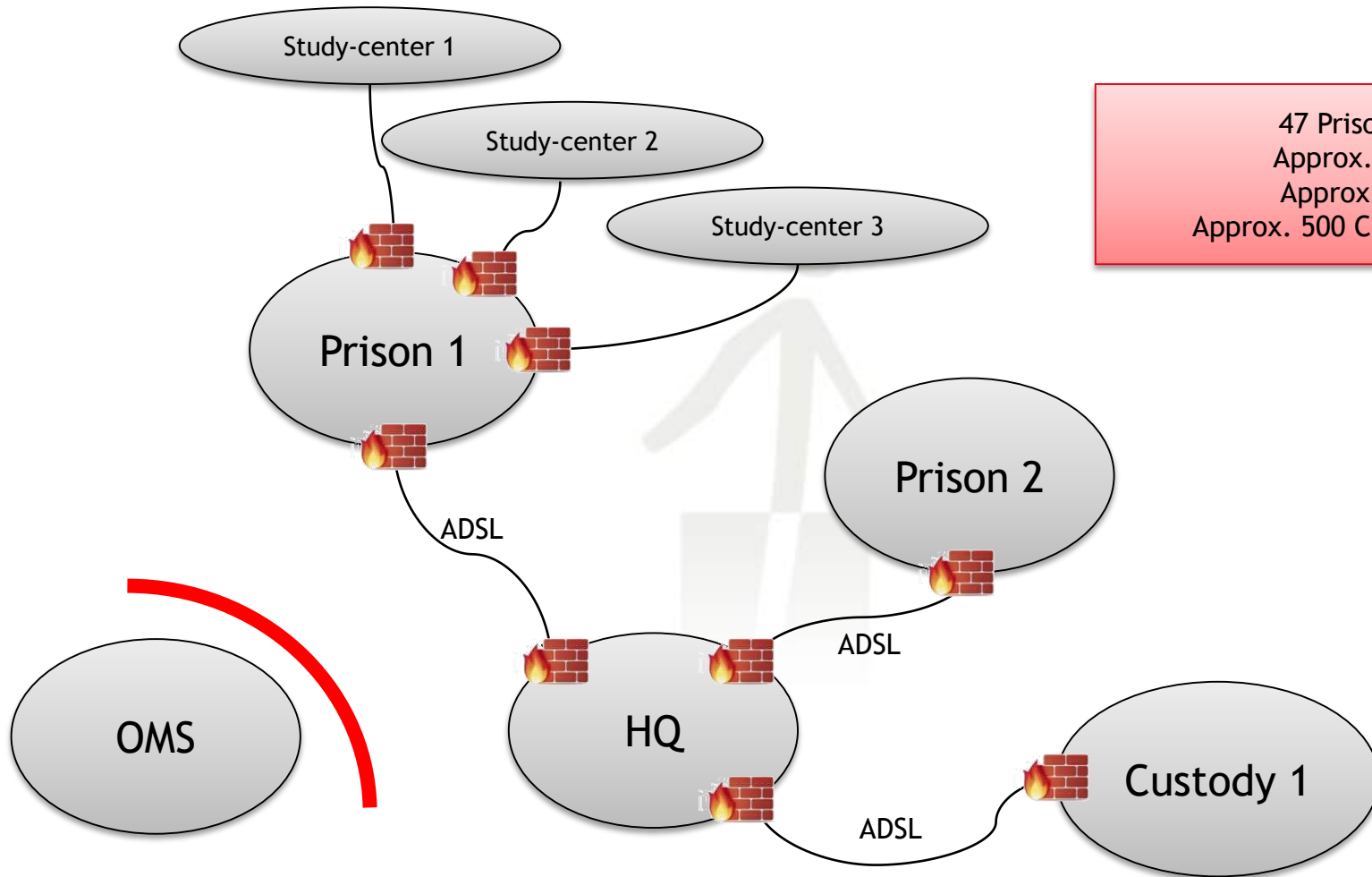
2017 - InIT 1.6 better connection

- **Challenges when replacing a legacy system**

- User acceptance
- Business processes
- Support and maintenance
- Organizational needs
- Infrastructure

- **Challenges when replacing InIT 1.0**

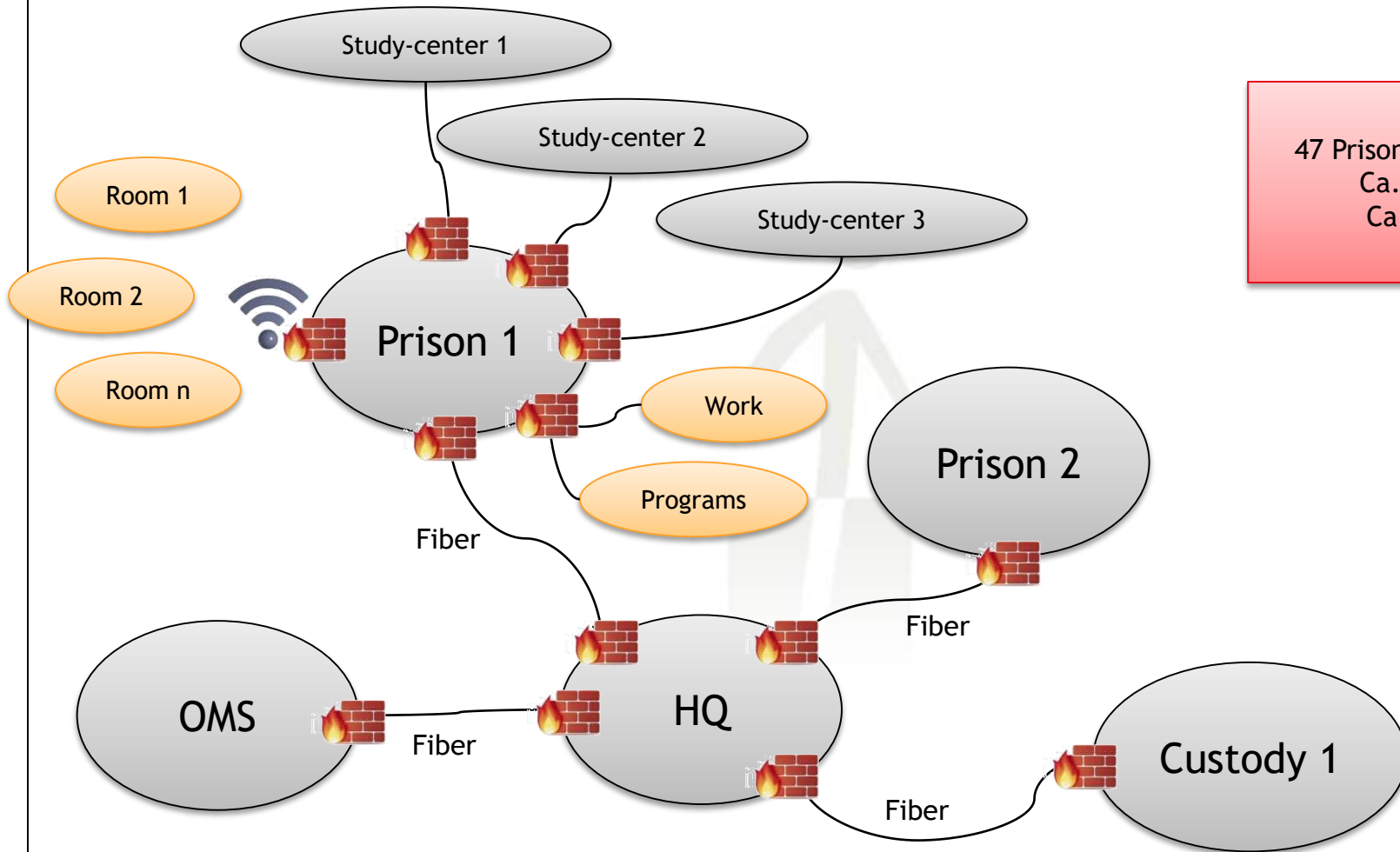
- System was created in response to a direct and immediate need
- Poor maintenance
- Underdeveloped infrastructure



47 Prisons, 3 Custodies
Approx. 1200 terminals
Approx. 2000 Accounts
Approx. 500 Concurrent users

- **Limitations**

- No integration with OMS
- No strong authentication
- Limited number of users
- Manual account management
- No identity federation
- Static network access control
- No intrusion detection
- No capabilities to manage sensitive information

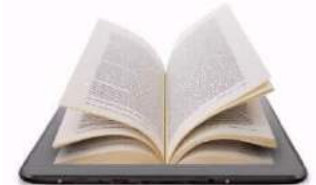


47 Prisons, 31 Custodies
Ca. 4500 terminals
Ca. 4000 Accounts

- **Challenges**

- Security aspects
- Secure integration between OMS and OSS
- Strong authentication - Smart card and biometrics
- SIEM - Capable dynamic logging and surveillance
- SOA - Service oriented architecture, flexibility
- Streaming - video calls, external communications, and surveillance
- Normalizing non-functional requirements
- Getting functional requirements from operational personnel

- Framework - Release 2.0
 - Smartcard and fingerprint access
 - Attribute based access control
 - Continuous monitoring - operations control
 - Streamed video - Educational purposes
 - Controlled messaging, asynchronous
 - Intranet - CMS
 - Digital forms - Electronic applications
 - File management - including tools for visitation
- Prepared to manage approx. 150 needs



@



- Prerequisites for launch

- Infrastructure - Fiber link between HQ and VO's
- User access - PKI solution/processes in place
- Operations - Support and maintenance in place
- Officers - Education of key personnel
- Project - Benefits analysis on needs

ICT SUPPORT OF THE REHABILITATION EFFORTS



OMS

- A individual designed plan will be designed during the first weeks of serving time.
 - An interview will be performed and together with other information this will contribute to the calcullation of the RNR-perspectives
 - Based on this a case worker will outline the perspectives for the incarceration in a activity plan

Shared information with local authority

- Information about
 - incarceration,
 - release and
 - the activity plan
- is electronically shared with the municipality in the area where the inmate is expected to reintegrate into society

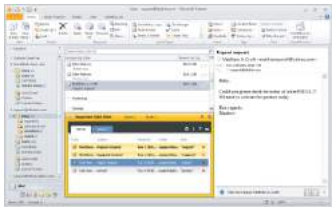
Collection of data

- The educational, work and treatment activities are coordinated through a programme called "PUMA"
- In use since 2018
- Outside the coordination benefits, this provides access to data regarding the type of activities performed by inmates.
- Over time this can be crossreferenced with recidivism rates

THE PROSPECTS OF TOMORROW

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**WHERE WE ARE HEADED
&
THE OBSTACLES AHEAD**



Other agencies

Probation

Education

Life outside prison

Family/ Friends



Super max



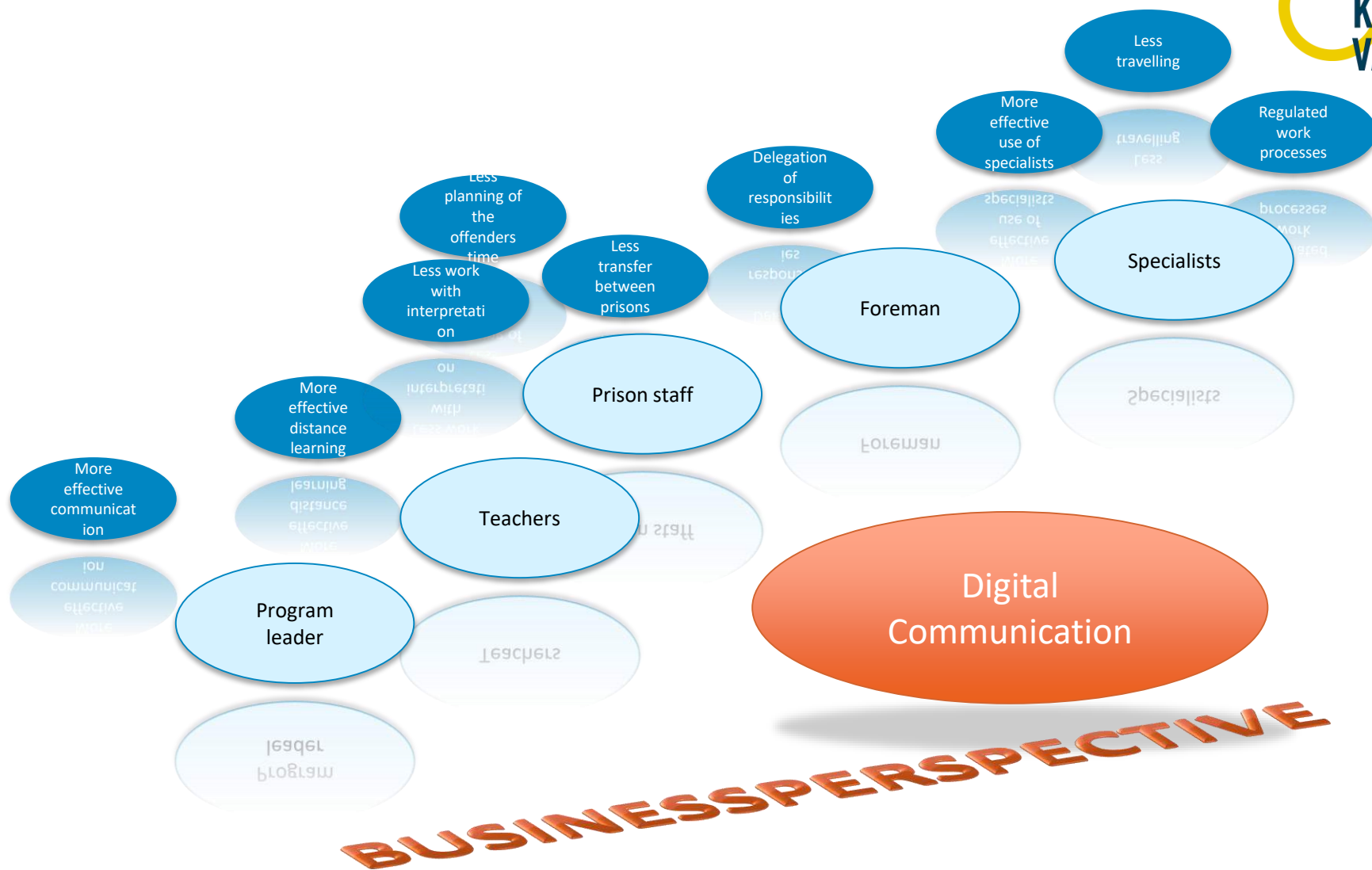
Medium security

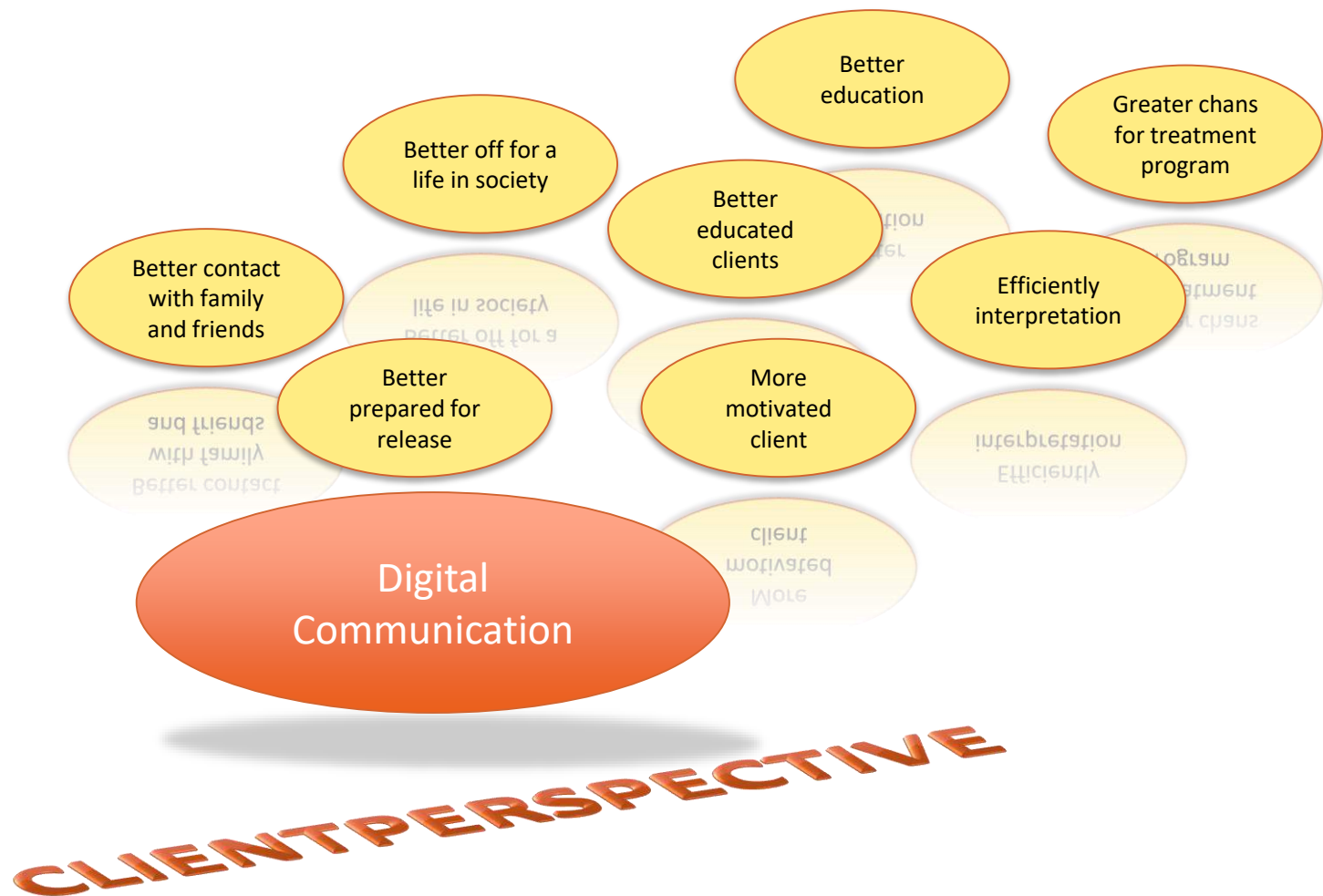


Open prison

More active transfer
through the system

Back- door
Release
After care





The skies are bright

- Wider use of self-service
- Offenderapps for parolees
- The new OMS



But the road is troublesome

- Ban of mobile phones in all insitutions
- Security breaches in various forms
- Violent conflict amongst criminals contributes to a tough on crime political agenda