

Rebuilding the Government Complex after the 2011 Oslo Bombing

Stein Berntsen, President Consulting

Dovre Group Plc

Norway

<http://www.concept.ntnu.no/english/>



Rebuilding the Government Complex after the 2011 Oslo bombing

Stein Berntsen
25-26. September 2014

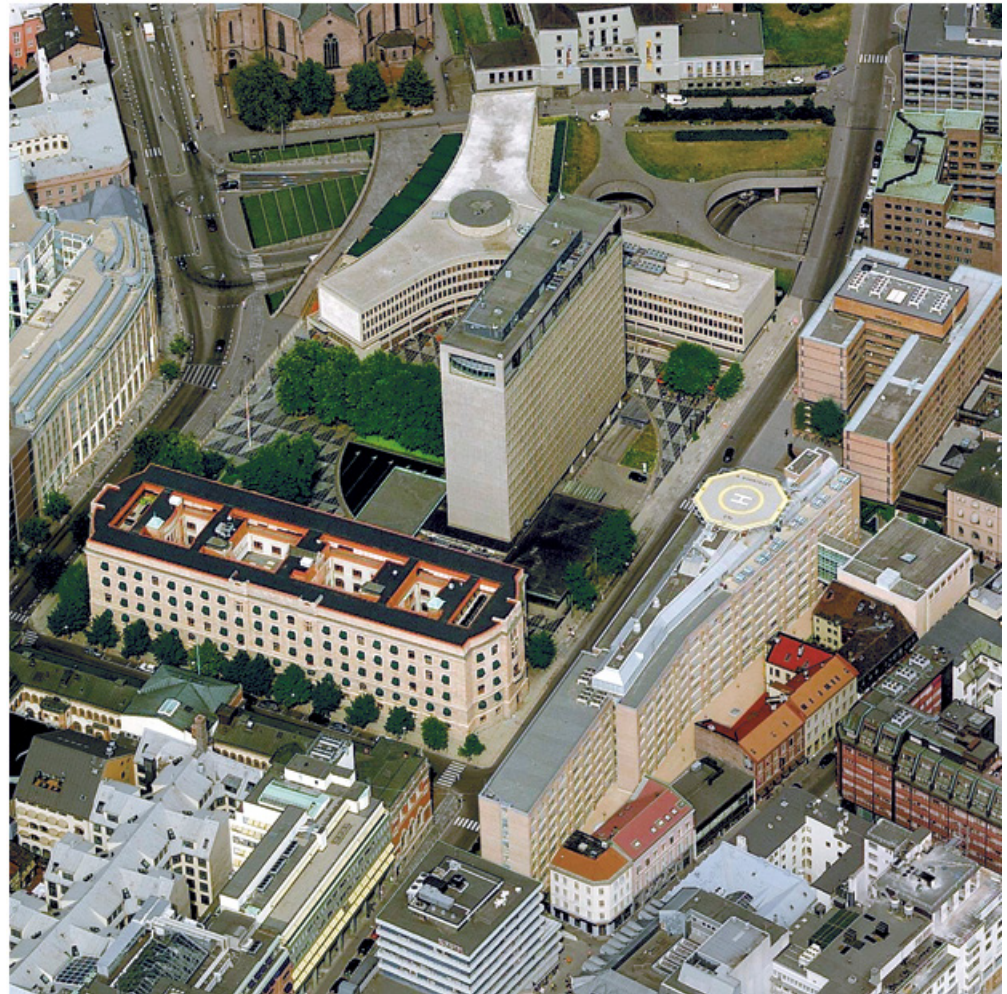
22 July 2011



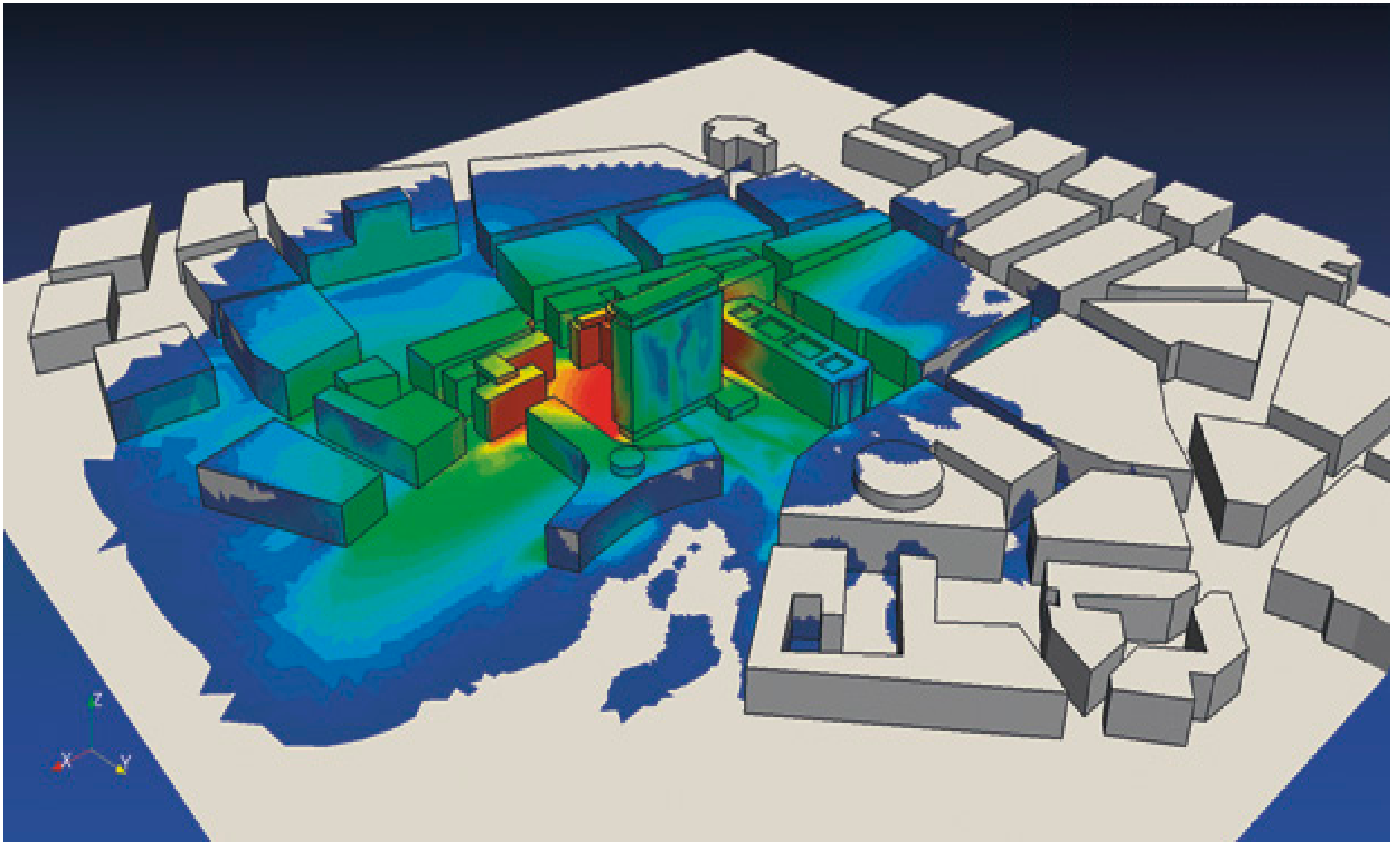
The Government Complex before 22 July

- 15 of 18 Ministries
- 10 Buildings
- 162 000 m²
- Est. 1895-2012
- 3690 employees

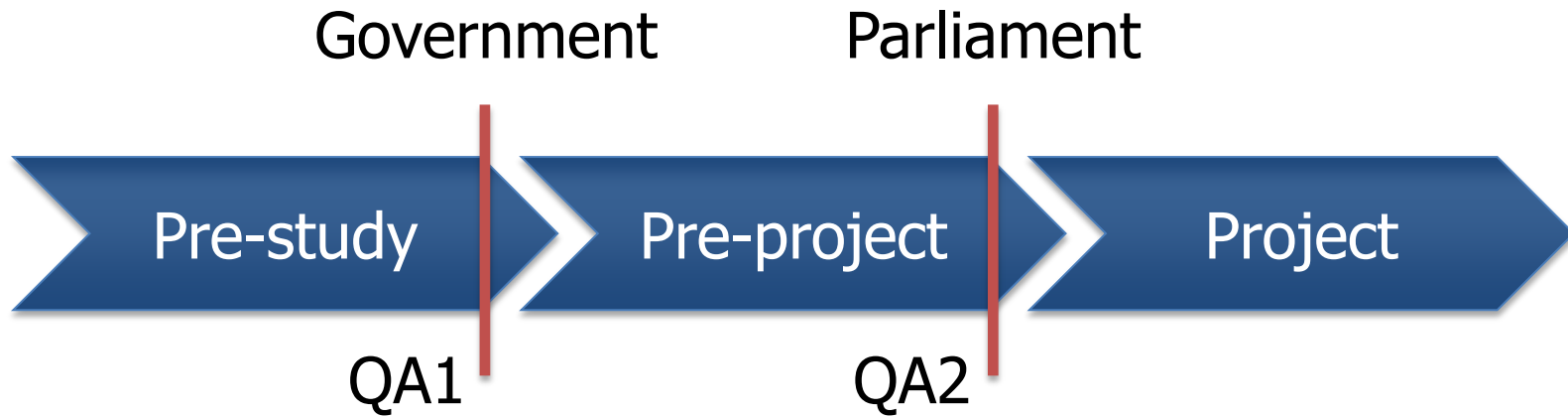
- 4702 excluding MoD
- 5070 employees in total



The 2011 bombing



Concept selection



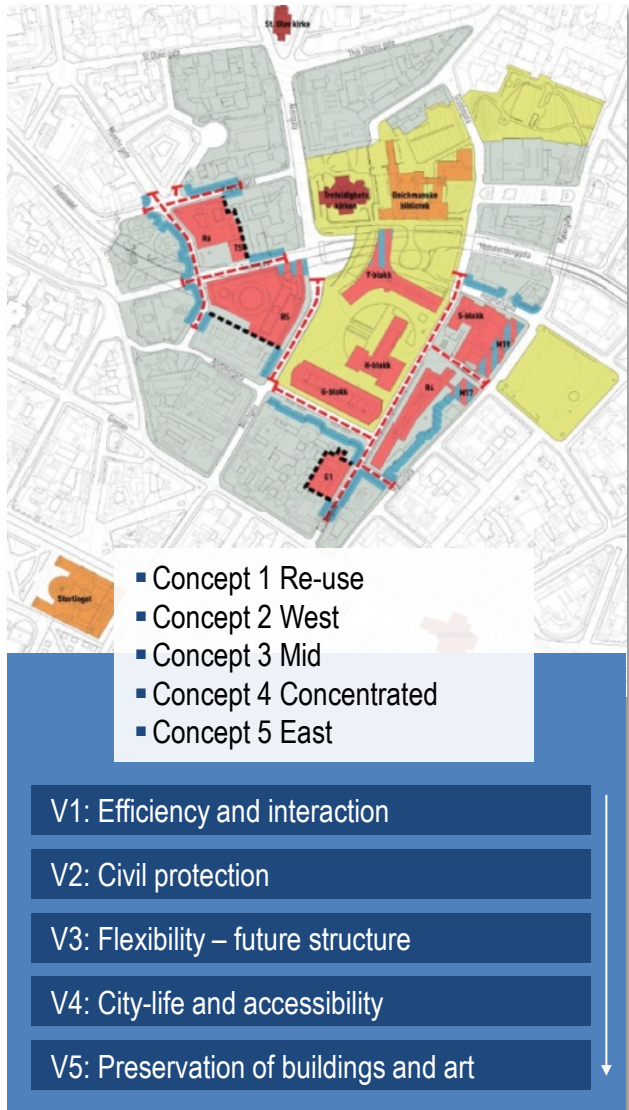
- Long-term solution for joint location of the ministries
- Space requirements for the Government Complex

The pre-study recommendations



- Ministries jointly located in new Government Complex
- Large degree of office landscapes and free seating (under-capacity)
- Demolition of the H and Y buildings
- Concept East

Overall assessment of the pre-study



- Thorough and relevant study
- Cost-effect analysis
- Separate analyses for degree of joint location, office solutions and preservation of buildings and art
- No perspective beyond 50 years
- No evaluation of different levels for safety, flexibility, building quality and environmental requirements.
- Evaluation criteria are prioritized

The concepts

K0 Base alternative



248 800 m² incl. remote offices

K1 Re-use



208 500 m²

The concepts

K2 West



184 300 m²

K3 Mid



180 500 m²

The concepts

K4 Concentrated



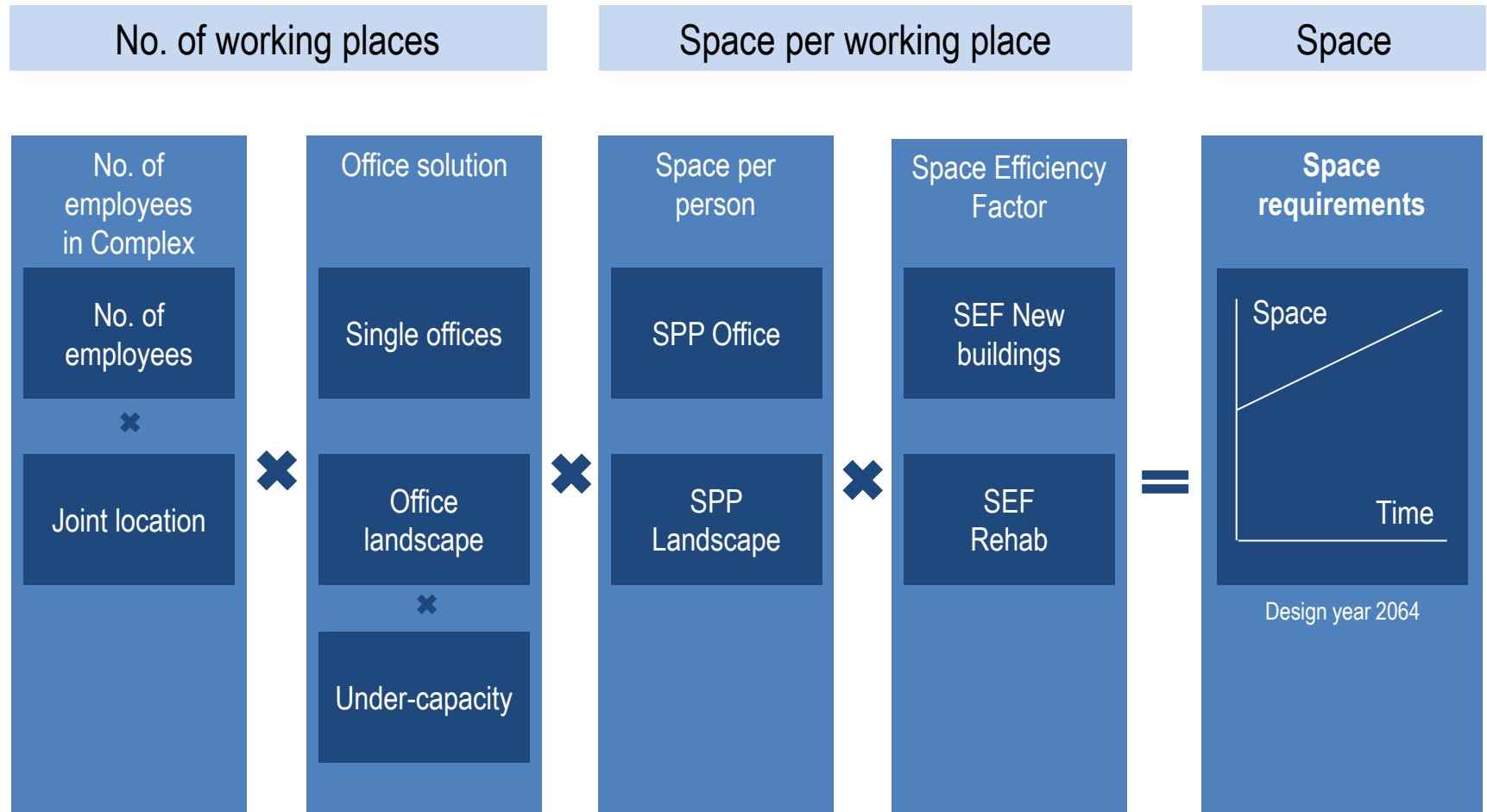
171 700 m²

K5 East

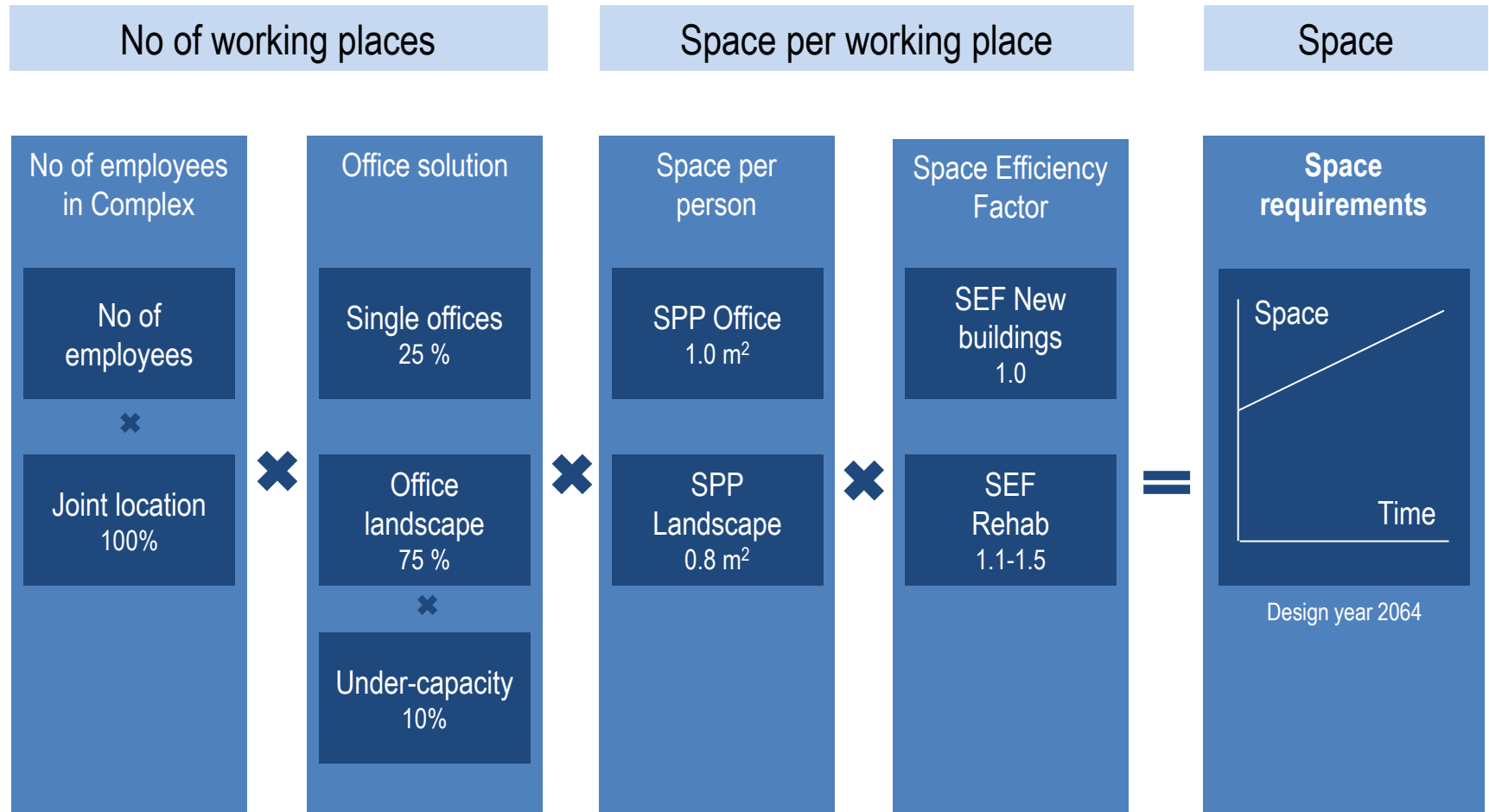


175 900 m²

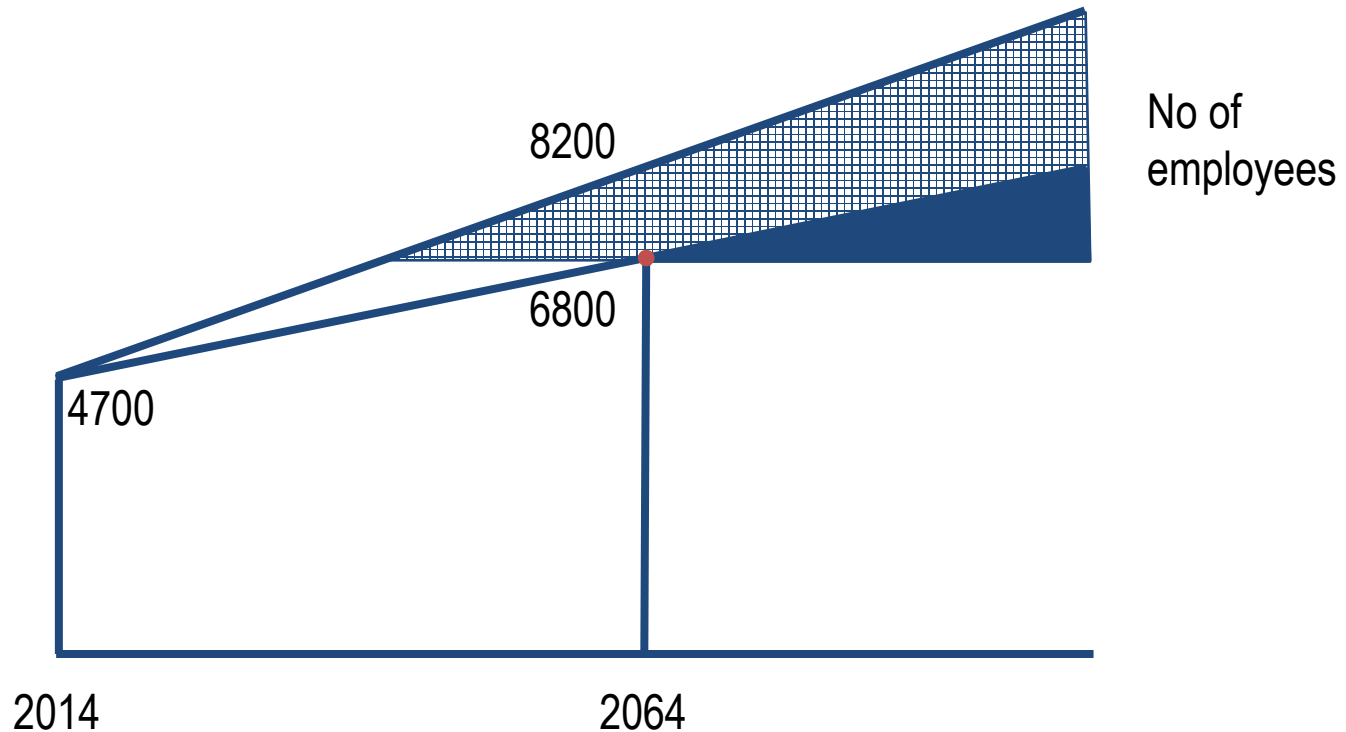
Space requirement model



Space requirement model



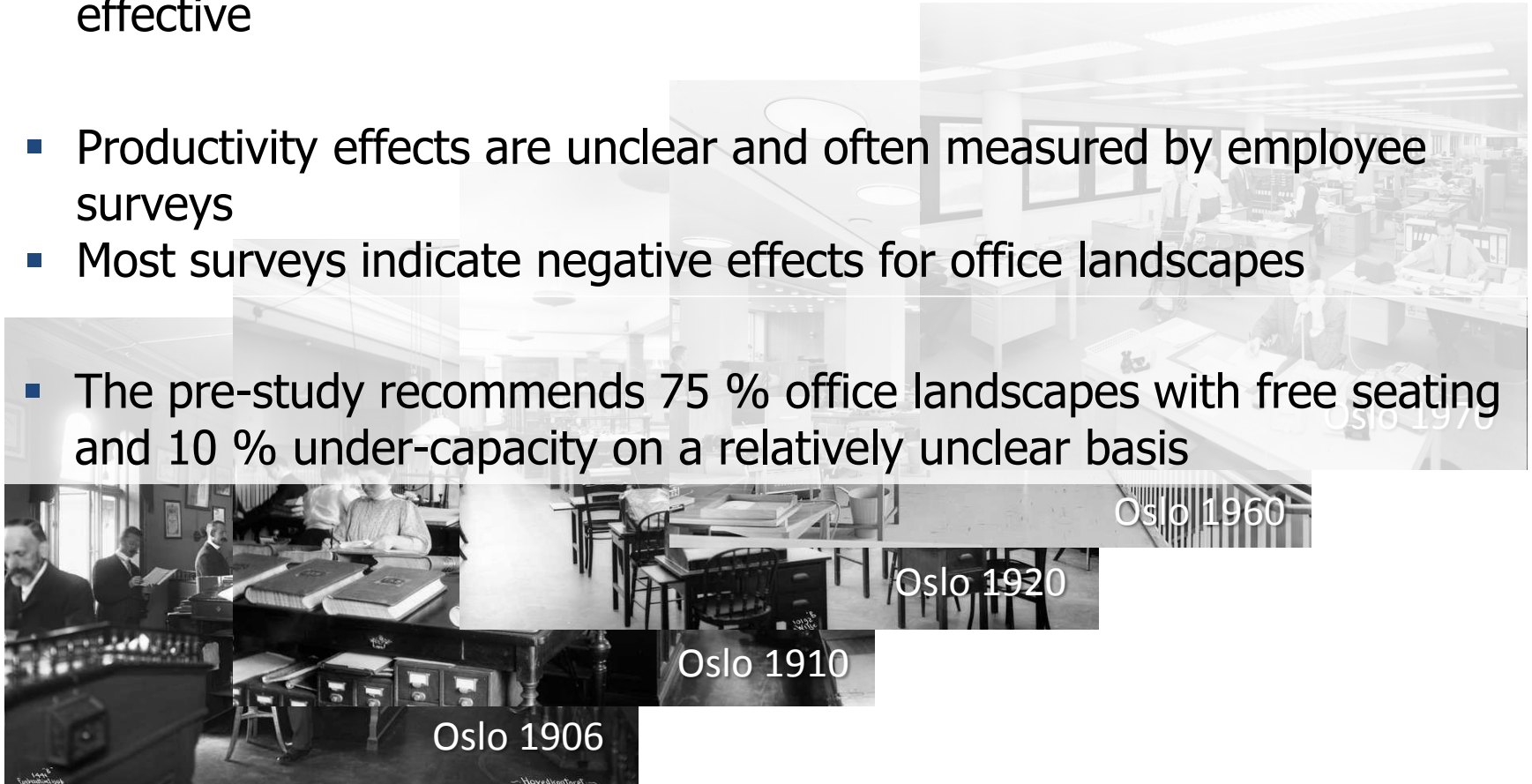
Space requirements



- Number of employees the next 50-100 years
- Level of office landscapes and free seating

New modern ways of working?

- Office landscapes with under-capacity are cost effective
- Office landscapes with no under-capacity are probably also cost effective
- Productivity effects are unclear and often measured by employee surveys
- Most surveys indicate negative effects for office landscapes
- The pre-study recommends 75 % office landscapes with free seating and 10 % under-capacity on a relatively unclear basis



Source: <http://www.oslobilder.no>

Adequate level of safety

Requirements for *adequate level of safety* are not defined

- Level of safety versus other organisations
- Differentiated safety levels for different ministries
- Safety zone of 20m – limits the land area for new buildings and require closing of streets

Preservation of buildings and art

Pre-study

- Recommends demolition of the H and Y buildings
- Preservation of H building costs 400 mill. NOK

Directorate for Cultural Heritage

- The H and Y buildings are of high national significance

Conflicting goals

- The building occupy a large area of land for relatively few employees



Cost-effect analysis

	K0 Base+	K1 Re-use	K2 West	K3 Mid	K4 Cons.	K5 East
Long-term capacity	0	+	++	++	++++	+++
City-life and accessibility	0	+	+	+	+++	++++
Preservation of buildings and art	0	++++	---	---	----	---
Efficiency and interaction	0	++	+++	+++	++++	+++
Safety	0	++	+++	+++	++++	++++
Flexibility	0	++	+++	+++	++++	++++
Investment cost	800	14 600	12 100	13 100	15 700	15 500
Cost to society	23 900	24 100	21 500	21 400	19 800	20 200
Relative cost to society	0	-300	2 400	2 500	4 100	3 600

Our recommendations

- Concentrated Concept 5 East with better land usage and build heights. Future expansion to the north-east

Concept selection should include decisions on

- Level of office landscapes and under-capacity
- Building quality ambition
- Adequate level of safety
- Preservation or demolition of the H and Y buildings



Government decision

- Concentrated Concept 5 East
- Joint location in the new complex
- Preservation of the H building
Demolition of the Y building
- Representative and practical architecture
- Flexible and modern working place
No free seating or under-capacity
Space norm per employee
- High environmental standard
- One basic safety level for all ministries. Special functions at higher level
- Planning based on 5700 employees in 2034





stein.berntsen@dovregroup.com

+47 900 77 531