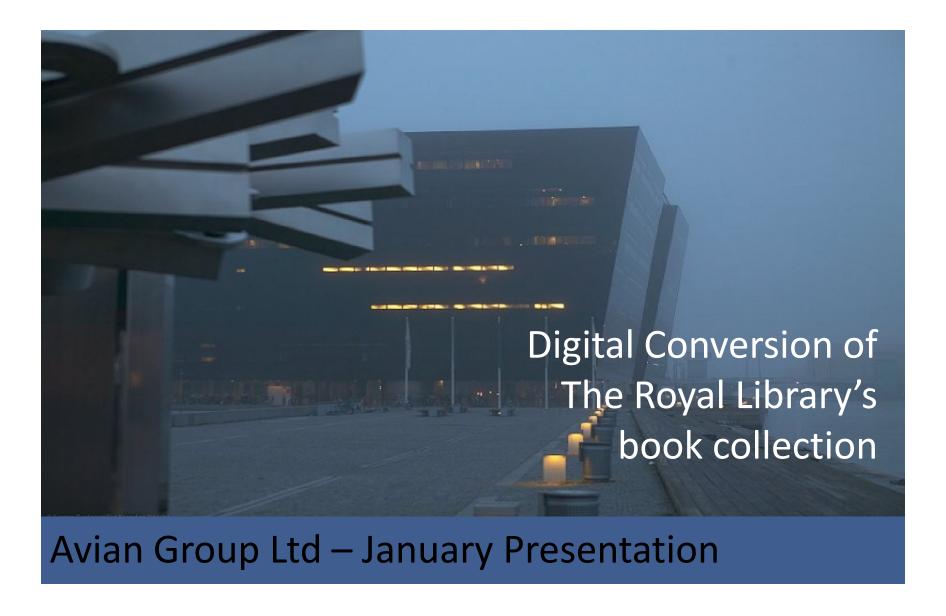
Kulturudvalget 2009-10 KUU alm. del Bilag 87 Offentligt







# Challenges

- Digitalize 1.6 million books with an average of 250 pages per book.
- RAW data will be more than 2000 TB in storage.
- Processed data (image cleaning and PDF conversion) will be more than 4000 TB in storage
- Books can't be shredded and need to be preserved – special Bookscanners are needed
- Scan and then clean images in post production
- OCR Scan to PDF/A files with machine-readable, searchable text



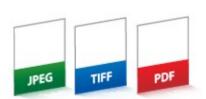
#### Phases



Scanning
 Book pages are scanned to digital media (FTP upload copy to customer)



Postproduction
 Images are cleaned and cut to fit (FTP upload copy to customer)



3. OCR Automation & Packing Images are OCR Scanned and converted PDF/A files Final packing and compression of PDF files (FTP upload copy to customer)



### Solution

- 150 staff will be working in 3 shifts to scan all books.
   Will take 3 to 3.5 years to complete
- 50 bookscanners, 200 workstations, 10 servers and 7000TB of storage will be needed to complete the job
- 30 Imaging specialists will be cleaning each individually scanned image in post production. 2.5 years to complete
- Batch PDF/A conversion will take 3-4 months to complete
- 60 OCR scanning specialists will be checking each OCR conversion for errors manually. 15 to 24 months to complete (Optional Service)



#### **Process**

- Process roughly 45.000 medias/books pr month
- Equal to 3 years for 1.6 million books
  - Plus estimated slip of 3 months for training and other delays



#### **Others**

- Shipping to and from destination
  - Optional Det Kongelige Bibliotek could seek sponsorship from Maersk for the logistics and shipping part?
  - Privat sponsors could chip in as well.
- Security
  - 24/7/365 Security
  - Sterile scanning areas
  - Medias and Scanning will be done in bonded area
- Production and storage facility
  - Constant 21 degree Celsius
  - Humidity between 50-55%



#### Price

- 60 million DKr for the whole project.
  - Does not include shipping and packing
- 40 million DKr for Scanning
- 10 million DKr for postproduction and OCR
- 3 million for facilities and security
- 3 million for IT and Storage (hardware)
- 4 million for digitalization processing and coordination.



## Questions?

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