CLEAN ENERGY OF TOMORROW

Electronic dosimetry management system replacement at Temelin NPP - challenges and solutions

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Reasons for a change

- Obsolete custom-made systems – for Dukovany and Temelin separately → aim to replace two systems with one
- Dosimeter readers end of life – integrated PC, operating system
- General ČEZ policy to use „standard“ SW
- Single user system – inefficient development, testing

Chosen solution

MIRION TECHNOLOGIES

DosiServ™

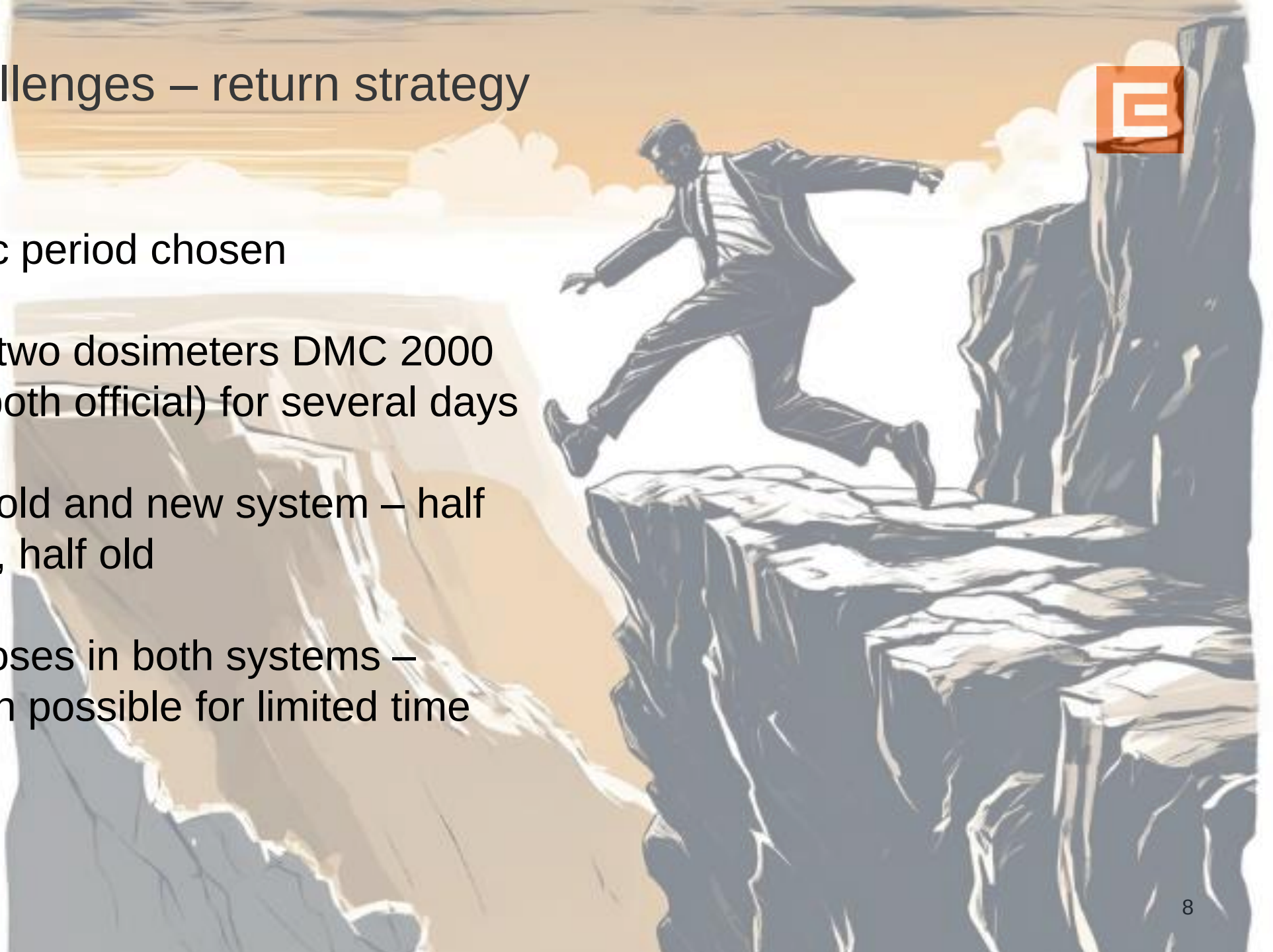
- 16 EPD readers LDM 3200
- Unlimited client aplication instalations
- 2 servers
- Support & maintenance contract

Swap-over challenges - integration

Swap-over challenges - data migration

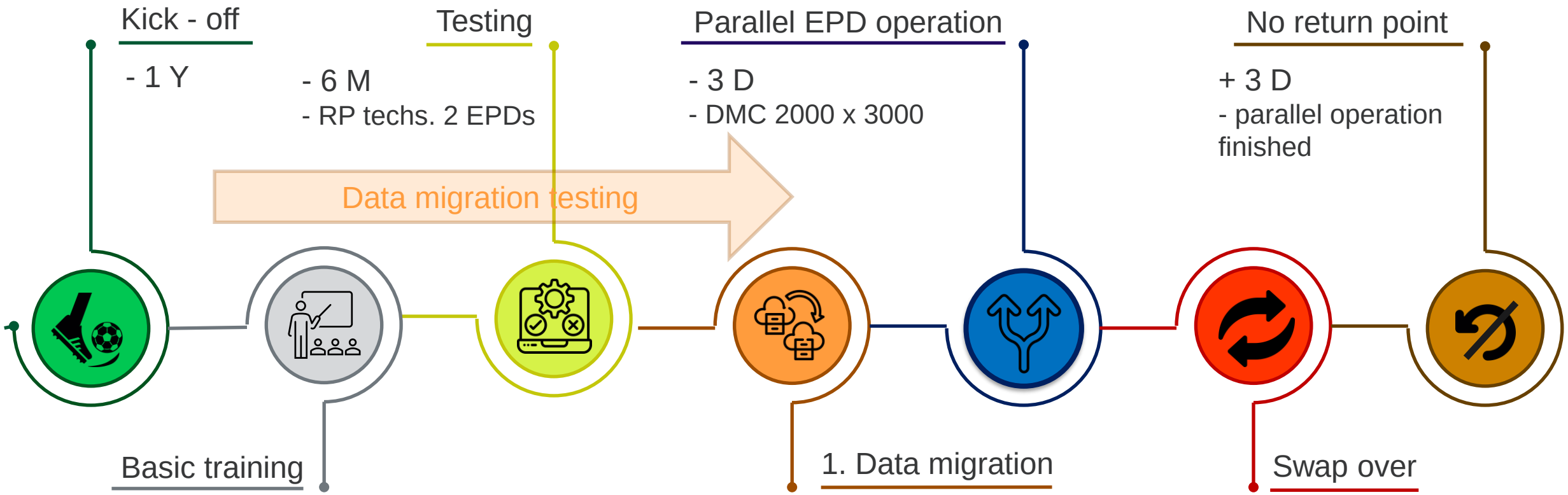
- several data importers available (workers, companies, RWP, Task, doses, visits, ….) – to incorporate text data into database
- test system installed, standard exports defined, results compared
- two information systems – data export to text files, data structure understanding
- in 2010 – switch to official electronic dosimetry
- inconsistent data in previous system

Swap-over challenges – return strategy

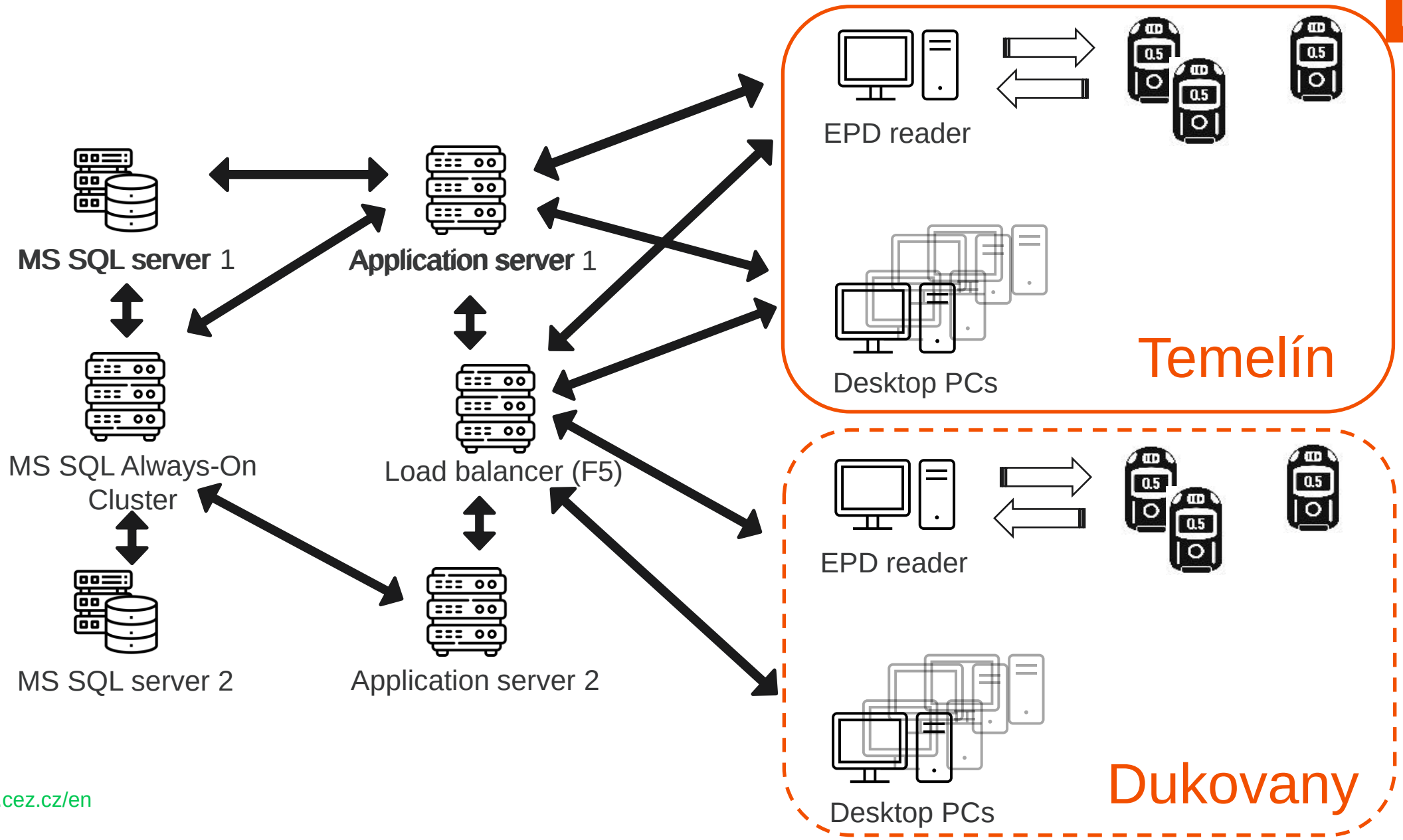


- Low RCA traffic period chosen
- Parallel use of two dosimeters DMC 2000 + DMC 3000 (both official) for several days
- Parallel use of old and new system – half of readers new, half old
- All visits and doses in both systems – seamless return possible for limited time

System migration timeline



Architecture – high availability system



Conclusion

Personal dosimtery system replacement at a powerplant is a delicate task, but with suitable tools and thorough preparation can be seamless.