

# Advanced robotic bed-washing

- Need defined back in 2009:
  - Erasmus University Medical Centre (Erasmus MC) to renew its bed washing facility to provide enough clean and disinfected beds for its daily operational needs. Exceeding 70,000 beds per annum.
  - Existing machine labour intensive and used a large volume of water and energy to operate.
  - Expensive and out of step with the hospital's sustainability policies and objective
- Forward Committed Procurement
  - Use of Competitive Dialogue Procedure
  - Award criteria: TCO/Service, Carbon Footprint and fit with our strategy
  - Focus on early dialogue and building trust in early phases
  - External consultants to challenge/lead/facilitate (EcoQUIP, TNO, Optimat, Gaynor Whytes)
- Solution delivered using FCP:
  - 2 advanced fully automatic robotic cleaning-units ("VMARCS" ) now installed and running
  - <http://www.imsinnovations.nl/index.php/vmarc-nl/vmarc-beeld>

## Outcome

- Auditable bed cleaning: first auditable cleaning process
- Carbon reduction (at least 65% in CO2 equivalents)
- Lower Total Cost of Ownership (at least 35% lower)
- Data on performance of beds, mattresses
- Technology can be applied to other cleaning and hygiene needs
- Winner 2015 PPI Award (European Commission)
- Adoption of FCP approach in area of beds and mattresses
  - New clinic (currently in extensive market consultation)
  - As a service “Pay for use and performance”
  - Benefits for patients and staff are critical

# Lessons

## Soft lessons:

- Try to dream and envision what is truly needed: adopt a design approach like an artist, designer, be self-aware and ask for help
- Focus on impact for patient and staff earlier in process and try to measure/"guesstimate" the benefits
- Adopt a change management approach in the market engagement phase (internally in particular): awareness, support, commitment, buy-in
- Test assumptions early on
- Explain over and over again

## Hard lessons:

- Get buy-in from Board of Directors and key stakeholders (e.g. patient-committee) on the process itself and (non-standard) business case
- Acceptance of uncertainty (inherent when solution is not available)