

# **Human Factors in Pilotage Keys Elements and Solutions**

Capt. Michel Fortin, Marine Pilot Brest 2015

## **Background and Context of Pilotage in Canada**

- Background of pilotage in Canada
- Pilotage Act (1972)
- Pilotage Authority's mandate
  - Efficiency
  - Safety
  - Powers

## Human Factors in Pilotage Working with Officers and Crew

#### Working language

- Communication between pilot and crew
- Communication between crew

#### Bridge resources management (BRM)

- From theory to practice
- BRM with pilot, navigation officers and bridge crew
- Pilot to pilot BRM

## Human Factors in Pilotage Fatigue

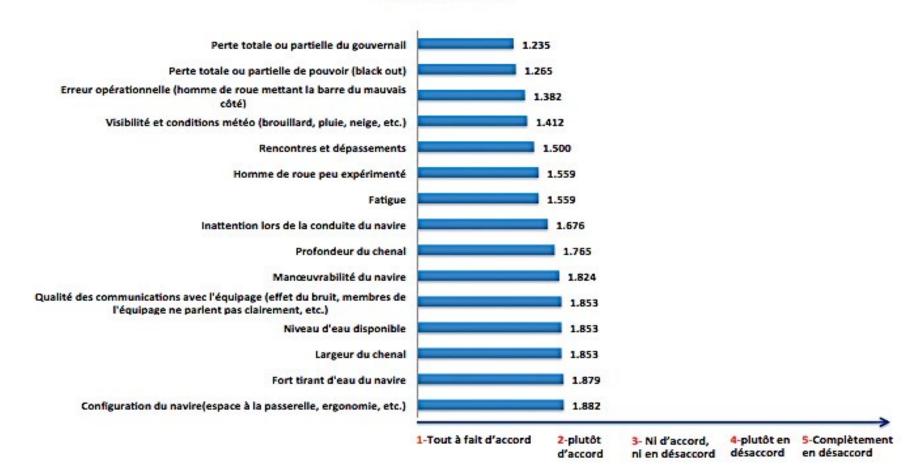
- Why a risk assessment on fatigue?
- Keys elements of fatigue (pilots)
  - Duration of job
  - Commute time between home and station
  - Sleep time between jobs
  - Pilot rotation predictions
  - Workload and schedule
- Risk assessment comity conclusions

#### **Commercial Pressures**

- Commercial challenges for North Atlantic Ports (pilots perspective)
  - Larger ships
  - Ship draft and air draft restrictions
- Cost reduction
  - Pilotage tariffs (double pilotage)
  - Use of tugs

#### **Seine River Pilots' Perspective**

Q16- Veuillez donner votre degré d'accord pour chacun des facteurs de risque suivants qui pourraient augmenter la probabilité de provoquer un incident ou un accident lors d'un transit (Moyenne)



#### **St-Lawrence River Pilots' Perspective**

Fréquence des facteurs cités dans les combinaisons



**Questions?** 

Thank you!