

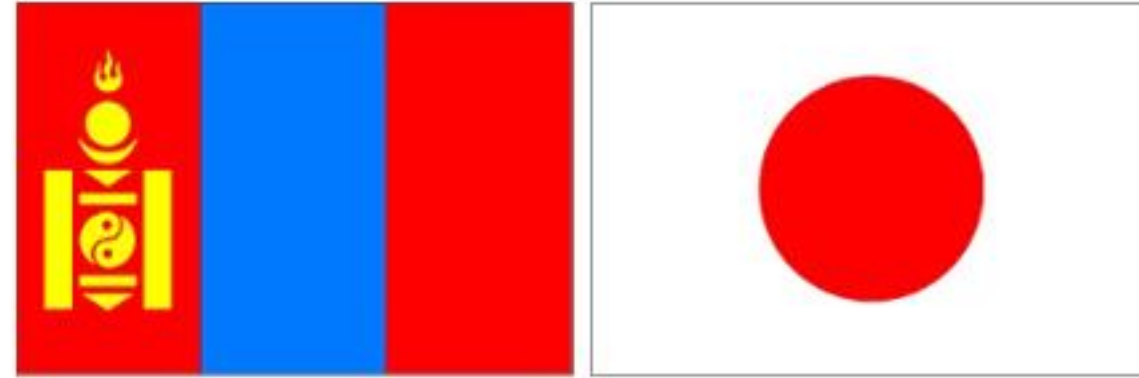
MICS

MONGOLIA OPEN
INNOVATION AND
CO-CREATION FOR
SDGs (MICS)-2023

Organizer



Co-organizers



MONGOLIAN ECO CONSTRUCTION

Speaker
Ch. Tsogerdene

November 29, 2023 at 10:48
80 km from Ulaanbaatar city
“Nogoon dov” pass ...



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- But this is when the sky is clear.
- If the sky is cloudy, even the car in front can't be seen.
- Due to this danger, a lot of car crashes, human lives are lost, animals are run over by cars.



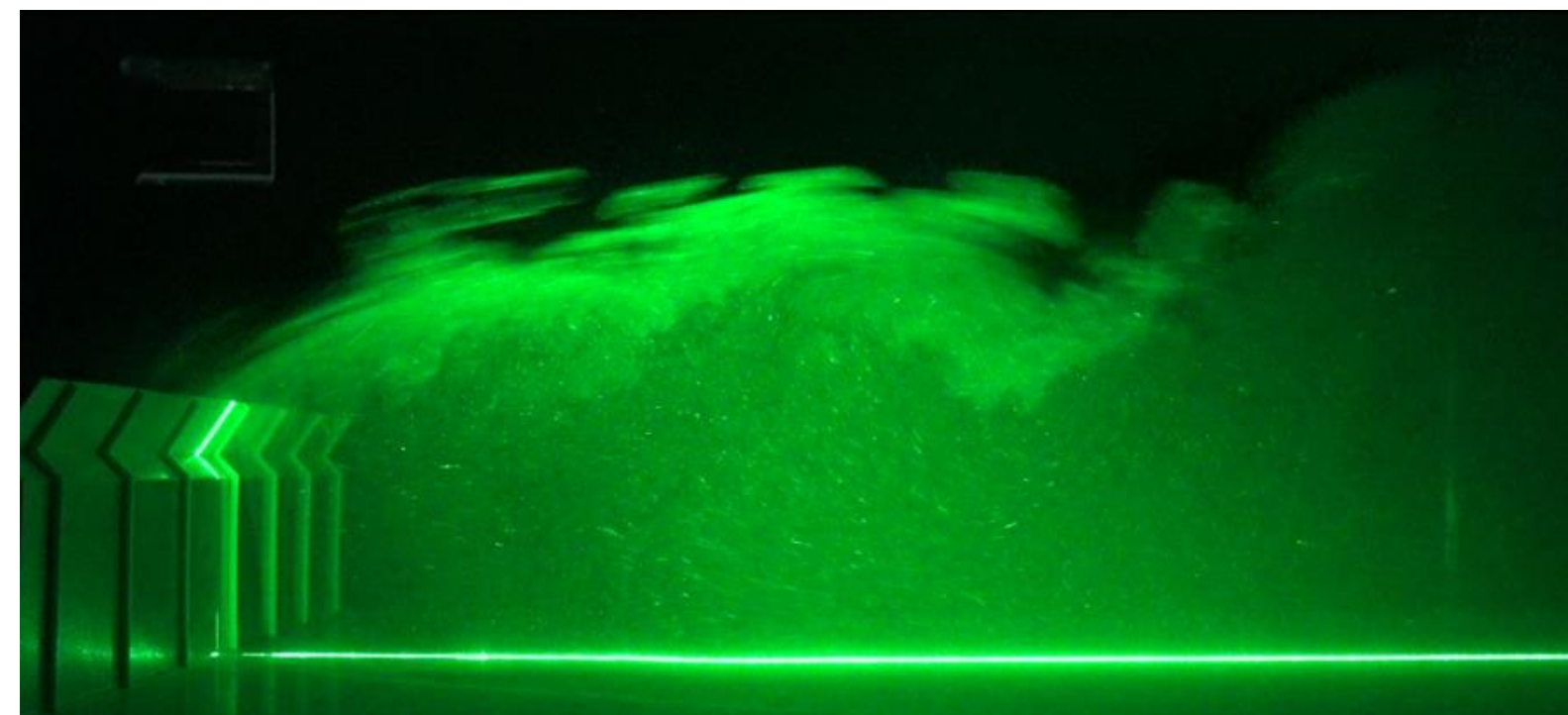
SUMMARY

By preventing blizzard damage and roadkill, we will provide Mongolians with a safe and secure transportation environment, and contribute to improving the productivity of the industry as a whole by improving the logistics transportation network.



OBJECTIVE

- ① Fixed-point meteorological observation survey (Mongolia)
- Collect and analyze local winter weather data using fixed-point weather observation equipment.
- ② Survey of local roads (Mongolia)
- Survey the road structure in areas where snowstorms are occurring locally.
- ③ PR to related organizations and information gathering (Mongolia)
- PR for product technology, explanation of MICS implementation details, request for data provision
- ④ Wind tunnel experiment verification (Japan)
- Based on local weather data, topography, road structure, etc., we will conduct wind tunnel experiments to verify effectiveness and select the optimal specifications.



ACHIEVEMENT/ACTIVITIES

- On-site installation of fixed-point weather observation devices



The above equipment was installed in the service complex along the CAMEL OIL highway, located 150 km from Ulaanbaatar.

ACHIEVEMENT/ACTIVITIES

- Survey of local road structure

A survey was conducted on the place where the weather equipment is installed and the areas where the road gets blocked in winter.

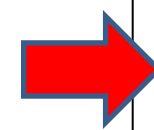
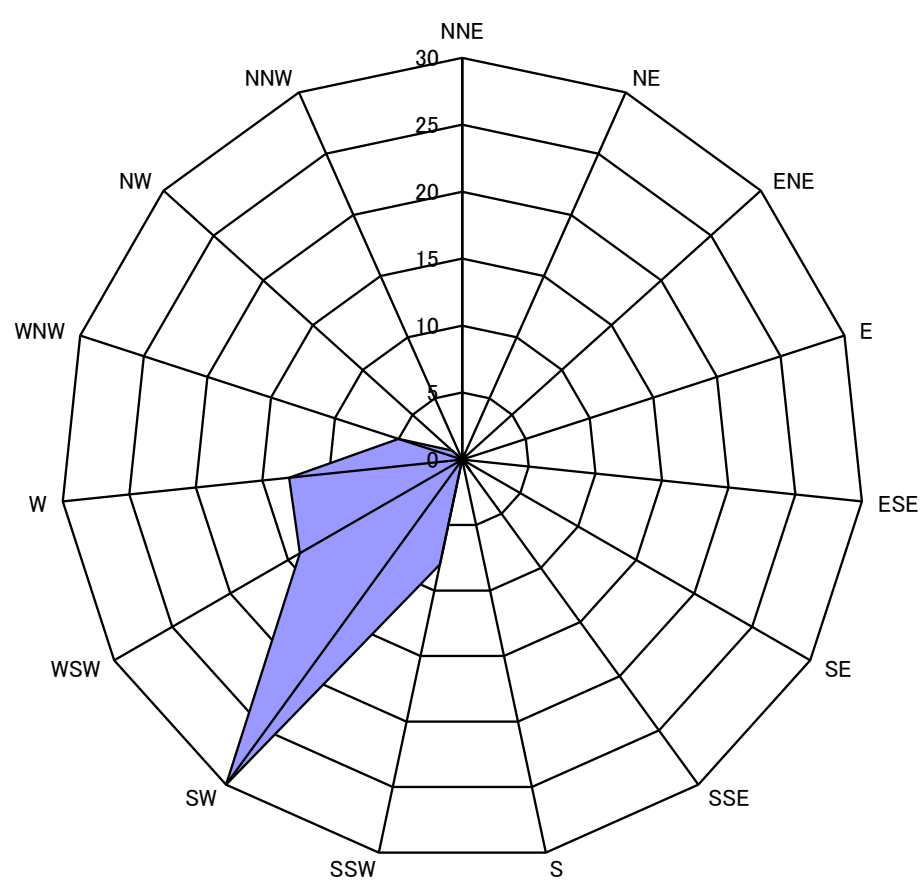


ACHIEVEMENT/ACTIVITIES

- PR to related organizations and information gathering



He gave an interview about the project to "Zuunii medee" newspaper. Information was also given at the "October" meeting of the Association of Service Providers along the Road.



Conditions for snowstorms to occur	
temperature	Wind speed
0 °C ~ 2 °C	8(m/s) or more
0 °C ~ -5 °C	7(m/s) or more
Less than -5 °C	5(m/s) or more

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW
0	0	0	0	0	0	0	1	0	8	30	14	13	5	1	0

Blizzard determination		
period	Number of occurrences	Number of days of occurrence
Oct 12th - Oct 31 st	2	1
Nov 1st to Nov 13th	70	9
total	72	10

- Temperatures are lower than in Japan, making blizzards more likely. Even before the onset of winter, snowstorms occur 10 days out of the month.
- When a snowstorm occurs, the wind often blows from the southwest. The wind blows across the road, making it very dangerous.

PLAN

- Measurement points were selected mainly around the Dundugov Expressway, which runs from Ulaanbaatar to Tubu via Genghis Khan Airport, where it had been confirmed in preliminary hearings that a snowstorm had occurred.
- • It was confirmed that small embankments had been built on the windward side of the road at two locations, 61KP and 85KP.
- • In a preliminary hearing with the road administrator, we learned that ``we are trying to take countermeasures with embankments in areas where snowstorms are severe and accidents occur frequently, but we are having trouble with no results.`` We determined that two locations had high priority and decided to measure 61KP and 85KP.
- • Measurements have been completed regarding elements necessary for future wind tunnel experiment verification, such as road width, width and height of the windward bank, and road direction.

FUNDING

- ✓ Visit 21 provinces to confirm the survey
- ✓ Signing agreements with provinces and localities
- ✓ Installation of test equipment



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Thanks for paying
attention