The Chairman's Report
Rune Engeset, NVE

Introduction

This is the Chairman's report to the 20th General Assembly (GA) of the European Avalanche Warning Services (EAWS), hosted on 12-14 June 2019 by the Norwegian Water Resources and Energy Directorate (NVE) in Oslo, Norway:

www.varsom.no/eaws

This report summarises the activities of EAWS from the Chairman's point of view for the period from June 2017 to June 2019.

Achievements

During the previous two years, activities included

- Asking if members are in compliance with standards. Results are listed in Table 1. I consider compliance as high, but there is room for improvements.
- Asking if members follow recommendations from last GA. Results are listed in Table 2. The recommendation for afternoon publication is pretty much implemented by most members. However, an English version of the warnings and an easy way to search and find the right warning based on a location or name, should be given high priority to implement in order to meet the needs of the users
- Asking if and how members provide an automated way to retrieve the avalanche bulletin. Results are listed in Table 3, and could be a basis for discussing if the new www.avalanches.org should display more warning data from our members in real time. Many members are doing a great job at promoting EAWS, but some are not – *yet* – displaying the EAWS logo and web-link
- Participating in all TAB meetings but one, and the informal meeting on avalanche problems between US, CA and EAWS members in Innsbruck in October 2018. Organised the Tromsø TAB-meeting in collaboration with the UiT/The Arctic University of Norway
- Engaging in several meetings regarding implementation of the changes decided for during the GA in 2017, and issued a communication plan and implementation guidelines for these changes
- Working with LWD Tirol on the new web site for EAWS, in collaboration with the LWD Tirol project manager Norbert Lanzanasto and NVE project member Solveig Kosberg. The new version of www.avalanches.org should be up running before the GA, letting the members review its content and report possible issues
- Preparing for the GA in Oslo in June 2019. Let us make it a great meeting!

Opportunities

Opportunities of EAWS, as I see it, are

- We are dedicated, motivated and skilled people and services – but we could probably learn even more from each other by introducing an exchange programme between services
- We have a clear purpose and good products – but we could probably give more value to our users and be more explicit on the limitations of our products and the value of sound decisions, by investing in better ways of communication. We could probably increase consistency and quality in our work by introducing a common electronic educational platform for training of forecasters and observers in key concepts (e.g. avalanche sizes, stability/sensitivity, distribution,

choice of avalanche problem, etc). This could also be useful for the users, and added as a part of
www.avalanches.org
- We are small technical community with close relations – but we could probably make more
efforts to involve US and CA in developing our services together. New knowledge, methods and
technologies could be more efficiently developed by getting together and apply for more R&D
projects on behalf of EAWS
- We are professional in risk management – but we could probably improve occupational health
by sharing experiences from the field on close-calls and accidents, as well as how we
systematically (or not) work with workers' safety. This could potentially make work even safer
for observers, forecasters and preparedness/rescue personnel in the future
- Our main goal is to avoid accidents and fatalities, and the number of fatalities per year is a proxy
for the effectiveness of our services. EAWS members should keep an updated list of fatal
accidents on www.avalanches.org, in order to show the scope of the problem and draw
attention to EAWS

Challenges
Challenges of EAWS to deal with, as I see it, are issues such as
- Lack of will to change. In a changing world, members should be able to change according to
changing users' needs and changing technological opportunities – or new knowledge. Making
progress together is important to our users. Even more today than before, as international
travelling, business and cooperation are more important than ever. Members should allow key
staff to prioritise working for EAWS tasks in the TAB and WG's, and value the benefit of change
to end users without worry too much about the costs of change internally. However, the benefit-
costs ration is an important consideration, as are funding issues for our members, when making
decisions involving major changes
- Lack of a common language. We should use English as a master reference and common language
as far as possible. This is even more important today with more members and staff, and more
users travelling across language- and country-borders
- Lazy decision-making may become more popular. In the future, users may to a much larger
degree be managing avalanche danger by relying on automatically produced advice from digital
devices, which combine data from different sources (avalanche danger, weather, terrain,
person/group, behaviour, accidents/incidents) to produce use-specific advice. How far into this
processing chain should and could our members be involved? What are the implications to
avalanche warnings services and other people/organisations delivering avalanche education and
awareness?

Nominations
The following nominations (and no other) were received:
- MOU $4.2 Chairperson: *Rune Engeset (NVE, NO) – re-elect*
- MOU $4.2 Coordinator: *Thomas Stucki (SLF, CH) – re-elect*
- Host GA 2021: SLF, Davos (CH)
- MOU $4.3 Technical Advisory Board:
    1. Igor Chiambretti (IT) – new
    2. Norbert Lanzanasto (AT) – new
    3. Thomas Feistl (GE) – new
    4. *Mark Diggins (UK) – re-elect*
    5. *Christoph Mitterer (AT) – re-elect*
    6. *Fabiano Monti (IT) – re-elect*
    7. *Karsten Müller (NO) – re-elect*

8. *Arno Studeregger (AT) – re-elect*
9. *Benjamin Zweifel (CH) – re-elect*

- MOU $4.3 Working Groups
  1. Matrix and scale (Karsten Müller)
  2. Funding and organisation (Christoph Mitterer)
  3. Local forecasting (No name)
  4. More WGs may be proposed. TAB and Chairman would like the GA to elect up to 8 members of TAB first, and then add additional WG leaders to TAB in the second step. This implies that TAB may become slightly larger than 8, but will make the voting easier.

Membership
The membership committee received an application for membership from A LURTE on 26 June 2017. The Membership committee recommends to adopt A LURTE as a new member.

The membership committee and Chairman were also approached by Ukrainian Hydrometeorological Center and the Swedish EPA, showing interest in becoming members.

Documents submitted for the General Assembly
These documents were distributed to the EAWS mailing list (emaws@avalanches.org) on 16 May:
- report_Chair_def.pdf (this report)
- report_TAB_def.pdf (coordinator's report)
- report_WG_1_EN_def.pdf, report_WG_1_FR_def.pdf, report_WG_1_IT_def.pdf, report_WG_1_GE_def.pdf (WG1 report)
- report_WG_2_EN_def.dpf (WG2 report)
- report_WG_3_EN_def.pdf (WG3 report)
- proposal_WG_FUND_def.pdf (proposal for new working group)
- application_ALURTE.pdf
- EAWS_MoU_signed_2017.pdf (our MoU from 2017)

The report from WG1 was translated from English into French, Italian and German, as it included a proposal with reasoning for voting.

Thanks
I thank the coordinator, Thomas Stucki, for excellent work during the last two years. I also thank the TAB members, WG leaders and WG members for their great efforts.

SLF provided translation services for the WG1 report. LWD Tirol managed the e-mail lists, and the old and the new web sites of EAWS. NVE provided funding to an external company for developing the new web pages for www.avalanches.org.

Errors and omissions in this report may be my mistake. Bear with me, I am only a human.

Rune Engeset, Oslo, 7 June 2019

Table 1. Compliance to standards

			General Assembly 2017 standards (ref. GA Summary and MoU)						
		EAWS member	Avalanche problems	EAWS matrix	Avalanche sizes	Scale	Pyramid	Regions	Val./responsibility
Andorra	N	SMA-OECC	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Austria	R	LWD Kärnten	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	R	LWD Niederösterreich	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	R	LWD Oberösterreich	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	R	LWD Salzburg	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	R	LWD Steiermark	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	R	LWD Tirol	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	R	LWD Vorarlberg	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Czeck Republic	N	HS CR	Yes			Yes	Yes	Yes	Yes
Finland	N	FMI	Yes	Yes	Yes	Yes	Yes	No	Yes
France	N	Météo-France	No	Yes	Yes	Yes	Yes	Yes	Yes
Germany	N	LWD Bayern	Yes	Yes	Yes	Yes	Yes	Yes	Yes
United Kongdom	N	SAIS	Yes	Yes (+ADAM)	Yes	Yes	Yes	Yes	Yes
Iceland	N	IMO	No			Yes	No	Yes	Yes
Italy	R	AINEVA	Yes	Yes*	Partly*	Yes	Yes	Yes	Yes
	N	METEOMONT Carabinieri	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	N	METEOMONT Italian Army	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	O	Alpsolut	Yes	Yes	Yes	Yes	Yes	No	Yes
Norway	N	NVE	Yes	Yes (+ADAM)	Yes	Yes	Yes	Yes	Yes
	O	NGI	Yes			Yes	Yes	No	Yes
Polen	R	GOPR	Yes	Yes	Official: old sizes*	Yes	Yes	Yes	Yes
	R	TOPR	Yes	Yes	Official: old sizes	Yes	Yes	No	Yes
Romania	N	ANM	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Slovenia	N	ARSO	Yes	Yes	No	Yes	Yes	Yes	Yes
Slovakia	N	SLP+HZS	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Spain	N	AEMET	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	R	CLA	Yes	Yes	Yes	Yes	Yes	No	Yes
	O	A LURTE (NOT MEMBER)	Yes	No	Yes	Yes	Yes	No	
	R	ICGC	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sweden	N	Naturvårdsverket (NOT MEMBER)	Yes	Partly(+ADAM Test)			Yes	Yes	Yes
Switzerland	N	SLF	Yes	Partly(+ADAM Test)	Yes	Yes	Yes	Yes	Yes

* Type of AWS	Status	
N: National	Yes	It is being used/implemented
R: Regional	Partly	It is partly being used/implemented
O: Other/local	No	
Colours: Not reported in 2019		
Not EAWS member		

18 of 29 services reported full compliance, 3 used old sizes, 2 did not use avalanche problems. Members in yellow did not report in 2019, only in 2018. Questions were:

- Are you using the EAWS avalanche problems in your forecast?
- Are you using the EAWS matrix when determining the danger level in your forecast?
- Are you using new (2017 decision) names for the avalanche sizes in your forecast?
- Are you using updated (2017 decision) EAWS danger scale in your forecast?
- Are you using the EAWS information pyramid in your forecast?
- Are your region boundaries clearly specified in your forecasts?
- Is the valid time period clearly specified in your forecasts? Is responsible issuer?

Table 2. Following recommendations

EAWS MEMBERS Status as per 06.06.2019 Implementation of standards and recommenda			GA2017 recommendations		
		EAWS member	English warnings	Easy search	Afternoon publication
Andorra	N	SMA-OECC	No	No	No
Austria	R	LWD Kärnten	o; only google-transa	No	Yes
	R	LWD Niederösterreich	No	No	Yes
	R	LWD Oberösterreich	No	No	Yes
	R	LWD Salzburg	Yes	No	Yes
	R	LWD Steiermark	Yes	No	Yes
	R	LWD Tirol	Yes	Yes	Yes
	R	LWD Vorarlberg	Yes	No	Yes
Czeck Republic	N	HS CR	No	No	
Finland	N	FMI	Yes	No	No
France	N	Météo-France	No	es (Apps) No (Wel	Yes
Germany	N	LWD Bayern	Yes	No	Yes
United Kongdom	N	SAIS	Yes	Yes	Yes
Iceland	N	IMO	Yes	No	Yes
Italy	R	AINEVA	Yes	No*	Yes
	N	METEOMONT Carabinieri	Yes	Yes	Yes
	N	METEOMONT Italian Army	2019/20	No	Yes
	O	Alpsolut	Yes	Yes	Yes
Norway	N	NVE	Yes	Yes	Yes
	O	NGI	No		No
Polen	R	GOPR	Partly**	No	Yes
	R	TOPR	Not yet	No	Yes
Romania	N	ANM	No	Partly	Yes
Slovenia	N	ARSO	No	No	No
Slovakia	N	SLP+HZS	No	No	No
Spain	N	AEMET	No	Partly	Yes
	R	CLA	No	No	No
	O	A LURTE (NOT MEMBER)	No		No
	R	ICGC	Partly	Yes	Yes
Sweden	N	Naturvårdsverket (NOT MEMBER)	Yes		Yes
Switzerland	N	SLF	Yes	No	Yes

Only 6 services followed all recommendations. In many places, it is still difficult or impossible to search and find the relevant avalanche warning, and to read it in English. Members in yellow did not report in 2019. Questions were:
- Are your forecasts easily available in English?
- Are your forecasts easily available by a location search (search for mountain or place name)?
- Do you publish in the afternoon?

Table 3. Promote EAWS or provide automatic machine-readable warnings

		EAWS member	English warnings	Easy search	Afternoon publication	EAWS	1. automat	2. format	3. url	4. valid	5. plan
Andorra	N	SMA-OECC	No	No	No	No		other xml		43685	
Austria	R	LWD Kärnten	o; only google-transl	No	Yes	Yes		CAAML		00 - 00; can be changed	
	R	LWD Niederösterreich	No	No	Yes	No					
	R	LWD Oberösterreich	No	No	Yes	Yes	No	No	No	No	No
	R	LWD Salzburg	Yes	No	Yes	Yes					
	R	LWD Steiermark	Yes	No	Yes	No					
	R	LWD Tirol	Yes	Yes	Yes	No	Yes	CAAML, Json	https://api.avalanche.r	0:00AM - 12:00PM	
	R	LWD Vorarlberg	Yes	No	Yes	Yes	Yes	CAAML, XML, RSS	see column T	normally 24 hours	
Czeck Republic	N	HS CR	No	No		Yes					
Finland	N	FMI	Yes	No	No	No					
France	N	Météo-France	No	es (Apps) No (Wel	Yes	No	Yes	xml, pdf	france.fr/?fond=produit	D 16-D1 16	
Germany	N	LWD Bayern	Yes	No	Yes	No	Yes	Caaml, xml	.xml; https://www.lawin release until next release		
United Kongdom	N	SAIS	Yes	Yes	Yes	Yes	Yes	RSS	ww.sais.gov.uk/feed/rs	18:00 - 18:00 24hrs	
Iceland	N	IMO	Yes	No	Yes	No					
Italy	R	AINEVA	Yes	No*	Yes	Yes					
	N	METEOMONT Carabinieri	Yes	Yes	Yes	Yes	Yes	XML, JSON	nti.pro/mobile/script.p	14-14	implemented
	N	METEOMONT Italian Army	2019/20	No	Yes	Yes				14.00 - 14-00 24 h.	
	O	Alpsolut	Yes	Yes	Yes	Yes					
Norway	N	NVE	Yes	Yes	Yes	logo, link	Yes	CAP,XML,JSON	api.nve.no	00-00	
	O	NGI	No		No	Yes					
Polen	R	GOPR	Partly**	No	Yes	Yes	Yes	Other XML	topr.pl/avalanche/xml/daily-bulletin		CAAML - 2019
	R	TOPR	Not yet	No	Yes	Yes					
Romania	N	ANM	No	Partly	Yes	No	No	pdf	http://www.meteorom	20-20	
Slovenia	N	ARSO	No	No	No	Yes URL	Yes	CAAML	/probase/www/avalan	D1, D2, D3 (00h-24h)	
Slovakia	N	SLP+HZS	No	No	No	logo +link	yes	CAAML	/nis.hzs.sk/?caaml&cro	8:30 -8 :30	
Spain	N	AEMET	No	Partly	Yes	No	Yes	other	on request	rama, Picos de Europa and Sierras de Cordel an	
	R	CLA	No	No	No		No			from +0 to +48	
	O	A LURTE (NOT MEMBER)	No		No	Yes					
	R	ICGC	Partly	Yes	Yes	Yes	Yes	XML,JSON	http://www.icgc.cat/b	00-00	
Sweden	N	Naturvårdsverket (NOT MEMBER)	Yes		Yes						
Switzerland	N	SLF	Yes	No	Yes	Yes	Yes (*)	other (push notification	-	17-17, 08-17	Improvement

* Type of AWS		Status			1. Do you provide an automated way to retrieve the avalanche bulletin?
N: National		Yes	It is being used/implemented	yes	2. In which format do you provide the data?
R: Regional		Partly	It is partly being used/implemented	no	3. Under which URL can the resource be found?
O: Other/local		No		camml	4. Whats the validity of your forecast/bulletin?
				cap	

17 members promoted EAWS (logo and/or web site). Only 13 provides warning on an automated machine-readable end-point. Members in yellow did not report in 2019.

Question was:
- Do you display the EAWS logo and URL on your forecasting web site?
- Other questions (1-5) are listed above in the table