

Proposed request for comments on international cell alert via cell broadcasting channelisation codes. V2.2

By Mark Wood, CellAlert Project, London, March 4th 2004.

Friends,

The CellAlert program seeks to put the power of Cell Broadcasting to the service of the humanitarian agenda. CellAlert intends to provide government to citizen mass communications, for the purpose of public safety.

However there are two channelisation issues;

- In many regions, more than one official language is used. In such regions, people speaking one language, can be regularly crossing borders into countries which in themselves have multiple official languages, with primacy in different order.
- In some cases, such as the maritime service, information must always be on the same code, regardless of which country the ship is in range of, or the benefit of a large enough audience would be lost.

Language codes for emergency alerts.

If we were to provide a single code for public safety alerts, it may cause practical and political problems, as to which language is used for the alert. Clearly the alert message must be transmitted in all major official languages for that region. Language is a very sensitive issue and there may be arguments as to which is primary and which secondary.

We need to head off that problem now by providing a mechanism that gives the networks and governmental authorities the most flexibility as to how to deal with this situation. It will be a matter for the networks and governmental authorities to recommend which languages must or may be used for alert messages, probably around 2 or 3 languages at one time in most cases.

The problem is that users need to turn the function on, through their phone. The user is best motivated to do that if he knows that he will get messages in his language. If the user can speak more than one language, he can enable more than one code at his discretion. In addition, if the user is a tourist or traveling businessman, he will get messages in his own language if that host country transmits them as such. For example, at airports, authorities may decide to transmit in English as well as the

official languages, so as to warn passengers regardless if they speak the local language or not. Popular holiday resorts is another example.

Furthermore there may be politically sensitive positions regarding which language is the first and which the second. By pre assigning them according the internationally recognized order specified in **ISO 639**, we avoid any potentially embarrassing arguments.

Naturally the use of 145 codes in order to cover most languages (plus some spare for special cases) does use up a lot of codes. However a network may use the unused codes for another purpose. In any case since there are 1000 codes available, this loss is a low price to pay in return for a good solution.

International codes

There are some cases where internationally agreed codes are required.

One case in point is that of the maritime service channel. Many small pleasure craft and small coastal fishing vessels are not fitted with marine radio equipment. However in many cases one of the occupants of the boat does have a mobile phone in their possession. Certainly most large ships do have a GSM installation. If so the coastal authorities may decide to relay maritime safety information over a Cell Broadcast maritime service channel. If so, we could expect coastal shipping to switch on this channel. In that case the channel number must be the same for every port the ship may visit, requiring an internationally assigned channel.

In another example, the UN has the responsibility to care for the security concerns of all international relief workers working for them and any Non Governmental Organisations (NGOs). If the UN security co-ordinator (UNSECORD) had a standard channel, then this highly mobile but very vulnerable group would be reachable on a geographically specific basis, but without having to change the channel number on their phone each time they change border.

These two examples, while extreme, do show that, to gain the most from geographically specific information by cross border users, international codes would be a prerequisite.

Therefore I propose that the Cell Broadcast Forum endorse the following coding scheme, subject to voluntary adoption by the networks concerned.

Mark Wood, CellAlert, Dec 2003.

Appendix 1 Proposed CellAlert channelisation according to ISO 639.

500 common training, exercise and test channel.

501-650 Languages listed in order (below) according to ISO 639.

501	aa	Afar
502	ab	Abkhazian
503	af	Afrikaans
504	am	Amharic
505	ar	Arabic
506	as	Assamese
507	ay	Aymara
508	az	Azerbaijani
509	ba	Bashkir
510	be	Byelorussian
511	bg	Bulgarian
512	bh	Bihari
513	bi	Bislama
514	bn	Bengali; Bangla
515	bo	Tibetan
516	br	Breton
517	ca	Catalan
518	co	Corsican
519	cs	Czech
520	cy	Welsh
521	da	Danish
522	de	German
523	dz	Bhutani
524	el	Greek
525	en	English
526	eo	Esperanto
527	es	Spanish
528	et	Estonian
529	eu	Basque
530	fa	Persian
531	fi	Finnish
532	fj	Fiji
533	fo	Faeroese
579	lv	Latvian, Lettish
580	mg	Malagasy
581	mi	Maori
582	mk	Macedonian
583	ml	Malayalam
584	mn	Mongolian
585	mo	Moldavian
586	mr	Marathi
587	ms	Malay
588	mt	Maltese
589	my	Burmese
590	na	Nauru
591	ne	Nepali
592	nl	Dutch
593	no	Norwegian
594	oc	Occitan
595	om	(Afan) Oromo
596	or	Oriya
597	pa	Punjabi
598	pl	Polish
599	ps	Pashto, Pushto
600	pt	Portuguese
601	qu	Quechua
602	rm	Rhaeto- Romance
603	rn	Kirundi
604	ro	Romanian
605	ru	Russian
606	rw	Kinyarwanda
607	sa	Sanskrit
608	sd	Sindhi
609	sg	Sangro
610	sh	Serbo- Croatian

534	fr	French	611	si	Singhalese
535	fy	Frisian	612	sk	Slovak
536	ga	Irish	613	sl	Slovenian
537	gd	Scots Gaelic	614	sm	Samoan
538	gl	Galician	615	sn	Shona
539	gn	Guarani	616	so	Somali
540	gu	Gujarati	617	sq	Albanian
541	ha	Hausa	618	sr	Serbian
542	hi	Hindi	619	ss	Siswati
543	hr	Croatian	620	st	Sesotho
544	hu	Hungarian	621	su	Sundanese
555	hy	Armenian	622	sv	Swedish
556	ia	Interlingua	623	sw	Swahili
557	ie	Interlingue	624	ta	Tamil
558	ik	Inupiak	625	te	Tegulu
559	in	Indonesian	626	tg	Tajik
560	is	Icelandic	627	th	Thai
561	it	Italian	628	ti	Tigrinya
562	iw	Hebrew	629	tk	Turkmen
563	ja	Japanese	630	tl	Tagalog
564	ji	Yiddish	631	tn	Setswana
565	jw	Javanese	632	to	Tonga
566	ka	Georgian	633	tr	Turkish
567	kk	Kazakh	634	ts	Tsonga
568	kl	Greenlandic	635	tt	Tatar
569	km	Cambodian	636	tw	Twi
570	kn	Kannada	637	uk	Ukrainian
571	ko	Korean	638	ur	Urdu
572	ks	Kashmiri	639	uz	Uzbek
573	ku	Kurdish	640	vi	Vietnamese
574	ky	Kirghiz	641	vo	Volapuk
575	la	Latin	642	wo	Wolof
576	ln	Lingala	643	xh	Xhosa
577	lo	Laothian	644	yo	Yoruba
578	lt	Lithuanian	645	zh	Chinese
			646	zu	Zulu

646-669 locally specified purpose or language.
 670 – 699, International alert channels (as below).

671 Maritime service channel. (IMO)
672 Aeronautical service channel. (ICAO)
673 Amateur service channel. (IARU)
674 Scientific services.

690 – 699 UN and International Organisations. E.G.

690 UNSECORD (UN Security Co-Ordinator.)
691 UNICEF (Child security)
692 WFP
693 WHO (health related info)
694 UNHCR
695 OCHA (IA Co-ordination)
696 Red Cross/ Crescent Movement.

Other channels at the discretion of the networks, and in conjunction with the governmental authorities and other interested parties.

Mark Wood, CEASA London. 24 Feb 2004.