



MINUTES

Special Committee meeting Thursday 24 July 2014

19:00, HMS Collingwood

Present:	Doug Hotchkiss	G4BEQ	Chairman	
	Joe Kirk	G3ZDF	Secretary	
	Dave Lacey	G4JBE		By Skype
	Wally Walker	G4DIU	Membership Secretary	By Skype
	Mick Puttick	G3LIK	Hon. Vice President	
	Doug Bowen	G0MIU	Commodities Manager	
	Bill Mahoney	G3TZW		By Skype
	Nigel Auckland	M0NAF		
	Neville Grant	G0FOD	Guest	
	Al Terry	G4PZV	Guest	

1. Chairman's opening remarks

The Meeting started at 19.00 and the Chairman welcomed everyone.

2. Apologies for absence

a. None.

3. The Chairman asked for the approval of the Committee for travel expenses so that the Newsletter Editor could attend the AGM.

This was approved unanimously

4. The purpose of the special meeting was to discuss "*the purchase and installation of D-Star equipment in order to introduce a further digital mode to the HQ Shack.*"

5. The Chairman started by saying that D-Star was not the only digital standard in use, DMR should also be considered.

6. Wikipedia defines D-Star as:

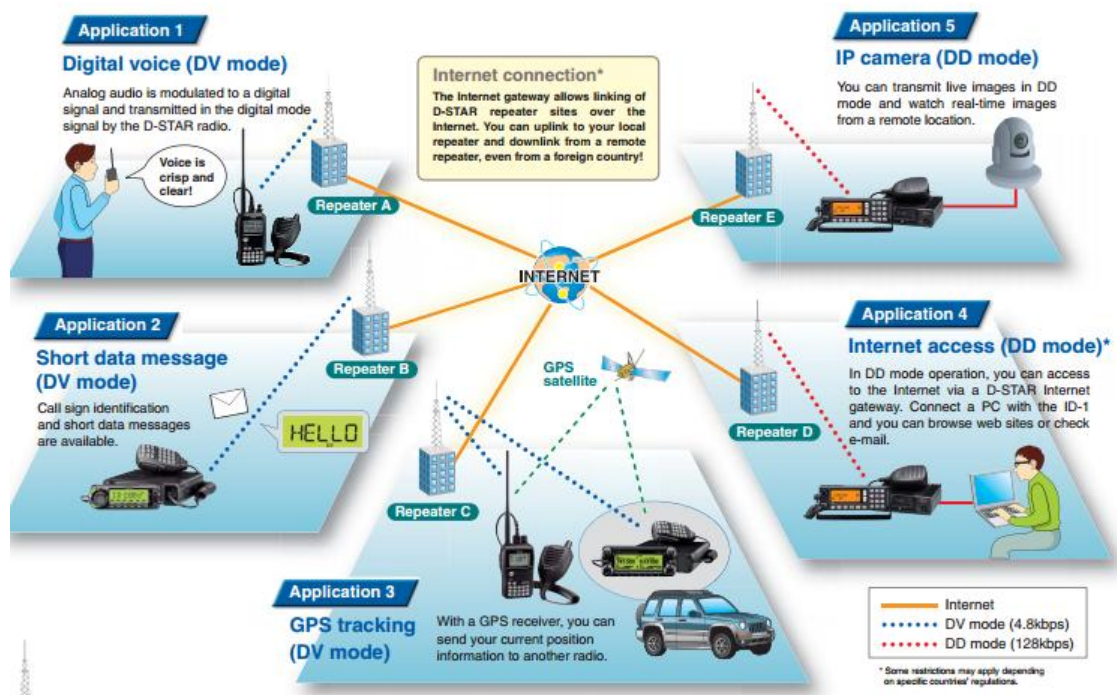
D-STAR (Digital Smart Technologies for Amateur Radio) is an [FDMA](#) and [GMSK](#) digital voice and data protocol specification developed in the late 1990s by the [Japan Amateur Radio League](#) for [amateur radio](#). There are newer digital radio modes used by amateurs, D-STAR was the first [packet-based](#) standard designed and widely used specifically for amateur radio.

7. Wikipedia defines DMR as:

Digital mobile radio (DMR) is an open digital radio standard for [professional mobile radio](#) (PMR) users specified in the [European Telecommunications Standards Institute](#) (ETSI) Standard TS 102 361 parts 1-4^[1] and used in products sold in all regions of the world. The applicable ETSI emissions compliance standards are EN 300 113 and EN 300 390. The standard was first published in 2005 and has been widely adopted by radio manufacturers and users.^[2] Products built to the DMR standard also comply with the U.S. [Federal Communications Commission](#) (FCC) mandates in the United States

for the use and certification of 12.5 kHz and 6.25 kHz narrowband technology for systems covered by Part 90 regulations. Designed as a low cost entry level radio system for commercial use, consequently DMR is not classed as a mission critical or critical communications platform. A situation further compounded by vendors introducing proprietary standards over and above the limited ETSI DMR standards list and nulling interoperability between different vendor offerings.

8. In essence both standards provide a means of connecting to a repeater using digital modes. This can be voice, data or pictures and may use a handheld transceiver, a desktop rig or even a PC. The picture below taken from the D-Star documentation gives a good representation. The repeater is then connected to the Internet and through that to all the other repeaters of the same type across the world.



9. Doug then went through some of strengths and weaknesses of both systems. He said that while D-Star was developed specifically for the Amateur Radio community DMR came from the commercial field and was widely used by the emergency services. Icom were the only company selling D-Star equipment whereas Motorola and Yaesu among others provided DMR transceivers. D-Star was developed in the 1990s but DMR is more modern. According to his research DMR is more difficult to program and set up particularly the repeaters. The question we need to ask was whether we should install one of the digital rigs and or a repeater and if so which standard. The aim was to ensure that the Society was keeping up with modern developments in amateur radio technology.
10. **(Secretary's note:** the number of repeaters of each type and their locations in the UK can be found in the following RSGB links.
<http://www.ukrepeater.net/d-star.htm> and <http://www.ukrepeater.net/dmr.htm>)

11. Nigel M0NAF said that he had visited Martin Lynch and spoken to their expert in the field. He reported that D-Star repeaters were installed across all the continents whereas there were no DMR repeaters in Africa or Australia. He said that D-Star was widely used across the US. He suggested that a desktop rig could be bought for about £400. He also reported that there was already a 70cm D-Star repeater in Fareham so we might have difficulties getting approval if we wanted to install a 70cm repeater in the Shack. According to what he found there is currently no DMR coverage in the HQ Shack.
12. Doug G0MIU said that even if we did not install a repeater we should adopt the D-Star protocol and install a rig in the shack.
13. Dave G4JBE said there were plenty of local D-Star repeaters and they gave good coverage. However he felt the cost of D-Star equipment was quite expensive and that DMR as the newer standard was the up and coming one.
14. Wally G4DIU said he agreed with Dave. He also agreed that the Society should keep up with modern developments in the field of amateur radio.
15. Bill G3TZW suggested that rather than selecting one or other standard we should be looking at both. He said that he was about to buy a DMR compliant rig for his own use. He said that DMR had a wider base of suppliers. He said that there were plans to convert some D-Star repeaters to DMR.
16. Neville G0FOD who currently is a D-Star user and an advocate of the standard said he would like to see a repeater as well as a rig in the Shack. He reported that he had been in touch with Icom (UK) and they had offered to sponsor and offer free of charge a VHF repeater and controller for installation in the HQ Shack. We would need to buy and install the necessary filters and enclosure. Initial estimates for this part of the equipment was £1,200. He said that currently there was no D-Star coverage in the Portsmouth or Southampton area and were we to install one the coverage would extend from Chichester along the coast, across to the Isle of Wight and as far north as Winchester. He had checked and found that GB7RN is available.
17. Al G4PZV who is also a D-Star user said he finds there is no QRM or QSB when he has QSOs using his handheld rig.
18. The Chairman then asked whether we should get a rig or a repeater and whether it/they should be D-Star or DMR.
19. It was agreed unanimously that:
 - a. Nigel as Shack Manager to purchase a D-Star rig for the shack that would be capable of being kept secure.
 - b. Neville to provide as soon as possible a detailed costing for the purchase and installation of a D-Star repeater allowing for the fact that Icom (UK) had offered a VHF repeater and controller free of charge.
 - c. Joe to check out the cost of obtaining the necessary licence and running costs of a D-Star repeater.
 - d. Chairman then to decide if the cost of the repeater was reasonable and feasible and proceed accordingly.
20. Nigel said he had been in touch with Peter G3PYB of the ATV group who said it would probably be within their capabilities to install the repeater.

21. The meeting ended at 20.00.

Date of next meeting – 11th September 2014 which is 2nd Thursday in the month.