

CHIEF SECRETARY'S OFFICE

Oik yn Ard-Scrudeyr

Our Ref: DF12/0029
Planning Application Ref.No: 12/01339/B

THE TOWN AND COUNTRY PLANNING ACT 1999
TOWN AND COUNTRY PLANNING DEVELOPMENT
(PROCEDURE ORDER) 2005


CSO Copy Letter

Applicant:	Communications Dynamics Limited
Proposal:	Erection of a crossed field radio antenna, Land Adjacent To Unit 203 Jurby Industrial Estate Jurby Isle Of Man

In accordance with paragraph 10 of the above Order, the person appointed by the Council of Ministers to consider this application has submitted his report.

In accordance with paragraph 10.3(a) and (b), a copy of the appointed persons report is enclosed.

On the 28th February 2013, and after consultation, the Council of Ministers accepted the recommendation contained within that report and the application was **approved** subject to the conditions specified below.

<p>Date of Issue: 4th March 2013</p> <p>Chief Secretary's Office Government Offices Bucks Road Douglas</p>	 <hr/> <p>Mr W Greenhow ACMA Chief Secretary</p>
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CONDITIONS OF APPROVAL:

1. The development hereby permitted shall commence before the expiration of four years from the date of this notice.
2. This permission relates to the erection of a crossed field antenna as shown in drawing numbers LP1, LP2, LP3, SP1, 1, 2, 3A, 3B and 4 date stamped 2nd October 2012.
3. The development hereby permitted is the subject of a temporary approval and must be removed from the site on or before the expiration of 5 years from the date of this decision notice and the land restored to its former condition within 1 subsequent month.

**Crown Division
Government Offices
Douglas
Isle of Man**

13 February 2013

**To the Council of Ministers
Government Offices
Douglas
Isle of Man**

Chief Secretary's Ref DF12/0029

**Planning Application to be determined under Section 10 of the
Town and Country Planning (Development Procedure) Order 2005.**

**Application No 12/01339/B by Communication Dynamics Ltd for:
Erection of a Crossed Field Radio Antenna, land adjacent to Unit
203 Jurby Industrial Estate, Jurby.**

I undertook an unaccompanied visit to the above site and its surroundings on 8 February 2013. I submit herewith my report, which I hope will be helpful in your determination of the application.

Alan Langton

Inspector

Application by Communications Dynamics Ltd for Erection of a Crossed Field Radio Antenna, Land Adjacent Unit 203, Jurby Industrial Estate, Jurby.

Site visit 8 February 2013

Preamble

1. The application was referred to the Council of Ministers in accordance with Section 10 of The Town and Country Planning (Development Procedure) Order 2005 as the site is owned by the Department of Infrastructure.

Site and Development

2. The Jurby Industrial Estate, associated with the adjacent airfield, includes hangars (or former hangars), other buildings evidently having origins ancillary to the airfield and also more recent purpose built units. The application site is part of a wider area of level grassland at the north-eastern edge of the estate, reached via an internal spine road. Ballamenagh Road (A14) runs alongside this edge of the estate, separated by a sod bank. Jurby School stands on the other side of the road, some 400 metres away to the south-east. A number of residential properties along and off Bretney Road (B3) are upwards of about 200 m away. The defined site is set back some 9.0 m from the A14, with a stated depth of 20 m by a length parallel to the road of 30 m.
3. The crossed field radio antenna (CFA) is an unusual design. It would be mounted on what is described as an electrical ground plane, 16 m square standing 3.61 m above the ground at its mid depth. The antenna would rise from the centre of the ground plane, initially as a cylinder of some 2.0 m diameter before splaying upwards and outwards as a lattice cone with an upper diameter of about 9.0 m. The antenna overall would rise 8.0 m above the mid depth of the ground plate, so that the top of the lattice cone would be some 11.61 m above the ground. The site's outer boundary would be fenced to a height of 1.25 m while the structure itself would be fenced to a height of 2.2 m. The application seeks approval for a period of 5 years after which the array would be removed and the ground restored to its former condition.
4. The defined site itself has no planning history; however the estate as a whole has had a succession of planning permissions for industrial developments. An application to erect this same proposal on land at Douglas Head was refused and an appeal dismissed in May 2012, essentially because there was held to be insufficient justification to warrant the visual impact at that location (PA11/01064/B; AP11/0148)

Representations

5. The **Planning Authority** statement sets out background facts, planning policies and suggested condition were approval to be given, but purposefully avoids any consideration of the merits. **Manx Electricity Authority** draws attention to a buried cable but there is no suggestion that this presents a significant impediment. **Mr Alfred Cannan MHK** opposes the proposal, having closely read the supporting documents he is unconvinced that the applicant has demonstrated a sustainable business plan to warrant the resulting intrusion in an open and exposed landscape. He is also concerned about the health effects and notes nearby dwellings. **Manx National Heritage** opposed the proposal on Douglas Head, suggest that the present context may be more suitable but seek a condition to require removal if the unit becomes redundant. **Manx Model Flyers** use the airfield to fly radio controlled model aircraft and seek an assurance that this would be not be subject to radio interference.
6. **Jurby Parish Commissioners**, opposing the proposal, consider that it would be highly visible, deter self build home owners and deter incoming industrial tenants. The Commissioners are dubious about resulting local job creation and contrast

the applicant's assurance regarding transmissions not materially affecting the school with the absence of consideration for closer located residents and those working on the industrial estate. They suggest that the metal clad hangars and industrial buildings would interfere with demonstration transmissions. They also question the rationale of relocating to the Isle of Man, rather than within the UK, following the loss of the applicant's previous demonstration site in Yorkshire when that land changed ownership. Or the demonstration site should be in India or one of the other countries described by the applicants as their target customers.

7. **The Applicants** state that planning policy requires an industrial location and DOI Property Officers, in full knowledge of the proposals, are prepared to lease the application site subject to planning approval. Manx Government declared policy is to encourage high technology activities. The CFA is a high value product suitable for global broadcasting use. Manufacture on the Island would stimulate the economy and provide employment. Manx National Heritage recognise the location's better suitability compared with Douglas Head.
8. The aim is to continue research and development of this type of antenna; also and very importantly to demonstrate its exceptional performance to potential customers. Amongst its other advantages compared with conventional monopole antennas, the CFA requires far less power input, much less height and much less land area for a similar level of performance. The site would not be used or licensed for programme broadcasting. The overall performance and characteristics have already been demonstrated by exhaustive field trials on a site at Silsden, Yorkshire. On the recommendation of OFCOM, Arquiva Ltd undertook independent tests, since published, confirming the antenna's exceptional performance.
9. The antenna would be highly visible from the A14 but within the context of an industrial estate. Its unusual appearance has previously caused curiosity followed by acceptance. There is no evidence of would-be home builders in the locality, who would surely seek to avoid the proximity of the industrial estate even on the assumption that there is land available and approved. Potential tenants on the industrial estate are likely to be more concerned with practical considerations, such as transport and infrastructure, rather than the antenna.
10. The closely guarded equipment and mobile power input, just 100 watts, would be brought to and from the site by vehicle only as required for a test or demonstration. The distance to the school was singled out in the application solely to provide particular assurance. Operation of the antenna would be restricted to medium wave bands within which the International Committee for Non Ionising Radiation Protection (ICNIRP) recommend safe levels for electromagnetic and electric fields of 0.73 amperes/metre and 87 volts/metre respectively. Independent measurements and theoretical calculations confirm that even at the edge of the ground plate (inaccessible to the public) the values would be 0.04 amperes/metre and 10.8 volts/metre, and these levels decrease rapidly with increasing distance. There is no human health hazard.
11. The location of existing metal clad buildings is such that they would have minimal effect on propagation. A feature of the CFA is that any induction fields are substantially less than with more conventional installations and the effect of metal structures significantly less. OFCOM requirements prevent interference with any other users of radio bands, and in particular the frequencies used could not interfere with radio controlled model aircraft.
12. Communications Dynamics Ltd is a Manx company. The initial testing in Yorkshire was simply because land owned by a shareholder was then available. The intention from the outset was development on the Island when opportunity arose. The Managing Director has lived on the Island more than 25 years, with

grandchildren born there. He has no wish to operate the company elsewhere unless forced to do so. There is no immediate promise of local jobs, but no possibility without the application proposal. This is a high value product, new rather than in competition with existing businesses, that could bring substantial benefits to the Island. All the Directors are experienced successful businessmen, who have invested heavily in this product, which is safeguarded by patent rights. The Managing Director is professionally qualified with a wealth of relevant experience up to senior level. It is unreasonable to seek commercially sensitive business planning information. Orders will not arise without a demonstration site.

Assessment

13. Concerns regarding transmissions are understandable, however the upper limits recommended by ICNIRP are already precautionary and in this case the levels even in the immediate vicinity of the antenna would be many times below those levels. Even these low levels would then attenuate very rapidly with increasing distance. There is no basis for withholding approval relating to human health. Moreover, the antenna would not be licensed for programme broadcasting but operate only as and when its associated equipment and power source were brought there on a vehicle.
14. The main issue is to consider the visual impact and to balance that against the potential benefits. Jurby Airfield (or Aerodrome) is notated as such by the Isle of Man Development Plan 1982, and accordingly the site is not in open unzoned countryside. That Plan also designates a swathe along the west coast as an Area of High Landscape or Coastal Value and Scenic Significance (AHLV), and this extends over the western side of the Aerodrome, taking in the immediate vicinity of the application site. The application is therefore to be determined having regard to Strategic Plan General Policy 2 and Environment Policy 2.
15. The industrial estate is not incompatible with the aerodrome land use notation but rather complementary. The antenna would be of unusual appearance but not out of scale with the larger buildings on the estate. Its form reflects its function and might, if successful, in time come to be seen as having been innovatory rather than simply strange. It is after all only familiarity that makes a conventional transmission mast appear 'normal'. In the setting of the industrial estate, I agree with the applicants that the antenna is likely to cause curiosity initially but in time become an accepted part of the scene. It would be seen from houses in the wider locality but only at some distance without significantly impinging on residential amenity. There is no conflict with any of the technical requirements of General Policy 2 regarding issues such as access and services, while inherently an aim of the proposal is to demonstrate best practice in reducing energy consumption, an aim sought by the Policy.
16. The antenna would be conspicuous from the A14 and further afield northwards, against a background of the industrial estate. It would be less conspicuous from other directions because of the masking effect of the rest of the estate. The quality and character of the landscape here is defined by the estate and the antenna would not in my opinion materially harm that existing character although it would add an extra interest to it. In short I see little conflict with either General Policy 2 or Environment Policy 2.
17. To the extent that some might nonetheless perceive the antenna as intrusive, this needs to be balanced against its potential benefits. It would be an entirely privately funded research and demonstration project; its promoters have considerable expertise backed by their own capital. Given my favourable conclusions regarding the impacts, approval should not depend on the submission of a detailed, commercially sensitive, business plan. If the project proves unsuccessful technically or commercially, little harm would have been caused to the public interest pending the antenna's removal and the site's restoration.

Conversely, if the promoters' faith were confirmed, this product just might become a major, innovative success.

18. There could be no guarantee that such success would be taken forward by way of manufacturing on the Island but this is the stated wish of the long term Manx resident Managing Director. What I think can be said is that if the demonstration model were not permitted on the Island, then the probability of subsequent manufacture here would be greatly, perhaps fatally, reduced. This project could prove to be the type of potentially sustainable high technology development sought by the emerging Planning Policy Statement: *Planning and the Economy* and indeed encapsulated by the phrase *Freedom to Flourish*.

Recommendations

19. I recommend that the application be approved subject to the following conditions. After consideration, I am not recommending the condition sought by Manx National Heritage to require removal sooner than the overall approval period in the event that the antenna becomes redundant: this would be very difficult to define or for the Planning Authority to monitor.
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Alan Langton

Inspector