CORPORATE POLICY STATEMENT NO. 45

PLANNING FOR MISCELLANEOUS STRUCTURES AND FACILITIES IN THE SWAN CANNING DEVELOPMENT CONTROL AREA

June 2016

1. OBJECTIVE

The objective of this policy is to ensure that miscellaneous structures and facilities in the Swan Canning Development Control Area (DCA) protect the ecological health, maintain and enhance long-term community use and enjoyment, and preserve the amenity of the Swan Canning river system.

2. SCOPE

Miscellaneous structures and facilities in the DCA require development or permit approval and may require a lease. This policy provides direction and guidance regarding how the Department of Parks and Wildlife (the department) assesses development and permit applications for miscellaneous structures and facilities in accordance with the *Swan and Canning Rivers Management Act 2006* (SCRM Act) and the Swan and Canning Rivers Management Regulations 2007 (SCRM Regulations).

This policy applies to applications for bridges; groynes and headlands; river retaining walls; car parks and associated access roads; pedestrian and cycle access paths; boardwalks; landfills; fuel storage systems; sullage pump-out facilities; signage; lighting; telecommunications infrastructure; dinghy, tender and small vessel storage facilities; fireworks displays; and other miscellaneous structures.

This policy provides guidance to applicants and other decision making authorities regarding the department's position regarding appropriate miscellaneous structures and facilities in the DCA.

In this policy, the Swan Canning river system means the Swan, Canning, Helena, Southern and Avon (to Moondyne Brook) rivers and includes the adjacent and nearby land areas within the DCA.

All guidance documents identified in this policy should be taken to refer to the most current published version.

3. CONTEXT

Bridges are prominent built features across the Swan and Canning rivers and serve as critical transport infrastructure. The design of bridges is largely defined by their functions and requirements (e.g. road, rail, pedestrian), nevertheless disturbance to water flows and sediment movement, construction techniques and resulting impacts and aesthetics are important planning considerations. Bridges that address aesthetic principles of design can enhance the amenity of the river system.

Groynes and headlands can contribute to riverbank stabilisation in some locations, however they have the potential to disturb natural sediment transport regimes and accretion and erosion processes. If these processes are not understood prior to groynes being constructed, there is the potential for changes in riverbank stability, formation of underwater sandbars, interference with navigation channels and the ecology and landscape character of the river system may be adversely altered as a result.

River retaining walls can control erosion, stabilise banks and protect infrastructure, however they usually provide poor habitat for local aquatic species, limit natural geomorphic processes along riverbanks and restrict access to the water. The construction of long lengths of river walls may result in the loss of river landscape values and estuarine and riverine habitats.

Car parking and associated access roads can connect the community with the river system. Many recreational areas and community and commercial organisations operating along the river system rely on adequate and convenient car parking facilities. A proliferation of car parks can detract from the amenity of the river landscape and impinge on recreation or conservation areas. Car parks in the DCA should be strategically located to meet community expectations and be designed to be safe, integrated into the local landscape and address water runoff that may contain hydrocarbon and other pollutants.

Boardwalks and pathways for pedestrians and/or cyclists provide public access to the river system and can enrich visitor experiences. A structured network of pathways and boardwalks currently provides pedestrian and cyclist access to most parts of the river system. There are locations that are not suitable for public access other than in an informal manner.

Landfills and rubbish disposal sites were common uses of the foreshores along the Swan Canning river system, from European settlement until 1982. Using sites along the foreshore for waste and rubbish disposal is no longer considered environmentally or socially acceptable. Leachate from these sites poses a risk to the water quality of the river system through surface water and groundwater pollution. Landfills can also cause the loss of wildlife habitat, facilitate the introduction of pest animals and reduce the community's benefit and enjoyment of the river system.

Fuel storage facilities in the DCA help support the boating community and convenient access to fuel is needed by both individual and commercial operators of powered watercraft. Fuel can be stored in either above or below ground tanks. Bunded above-ground tanks have been favoured in the past because they are accessible for maintenance and leaks are easily detected. Below-ground tanks now have the technology to be a viable and safe option as well, and can be more appropriate in locations where the preservation of amenity is important.

Sullage pump-out facilities connected to reticulated sewer provide for appropriate disposal of sewage and wastewater from vessels. In accordance with the Department of Transport's (DoT's) sewage discharge strategy, sewage discharge from vessels into waters of the Swan Canning river system is prohibited.

Signage provides directional assistance, identifies hazards, facilitates appropriate use, interprets natural and cultural features and values, and helps communicate information about community activities, commercial operations and the Riverpark in general. Signage can however, detract from the amenity of the river system if it is not related to approved uses, is in poor condition or if there is an inappropriate accumulation of signs

at a given location. Section 9 of the SCRM Regulations requires a permit for exhibiting signage, with exceptions outlined in section 9(2).

Telecommunications infrastructure can offer public benefits. The expansion and installation of telecommunications networks usually involves development that may have impacts on the character and amenity of local environments. In the DCA, the location, siting and design of telecommunications infrastructure is to protect the ecological health, landscape character and amenity of the river system. The *Telecommunications Act 1997* requires the installation of telecommunications facilities, except those that are exempted specifically by the legislation, to comply with State (and local) planning and environmental procedures. Low-impact facilities described in the *Telecommunications (Low-Impact Facilities) Determination 1997* and *Amendment No. 1 1999* are exempt under the Telecommunications Act when installed by a carrier. The determination specifies that no facilities are low impact in "an area of environmental significance".

Dinghy, tender or small vessel storage facilities assist in the management of the Riverpark shoreline and public foreshore reserves in the Riverpark. Appropriate dinghy, tender or small vessel storage facilities help to mitigate environmental impacts on the Riverpark by protecting the river shoreline and associated riparian vegetation, maintain and improve amenity, and enhance public access to and along river foreshores. The proper planning for storage facilities provides a basis for establishing dinghy, tender or small vessel management systems to be implemented by the relevant authorities responsible for managing foreshore reserves in the Riverpark.

Fireworks displays and lighting installations can contribute to and enrich the community's use of the river system. In some cases, private or public fireworks displays or lighting installations may disrupt nearby residents, wildlife or acceptable uses of the DCA and there is a need to manage their location, timing and frequency. The debris associated with fireworks displays over the river can be significant. Minimising and managing debris is therefore a key factor when planning for fireworks displays in the DCA.

This policy supports the implementation of *State Planning Policy 2.10: Swan Canning River System* (WAPC, 2006) and the associated policy statements for parts of the river. The department will have regard for the *Swan Canning River Protection Strategy* and its subsidiary documents, such as the *Land and Waterway Use Plan* (in preparation) and *Swan River System Landscape Description* (SRT, 1997) when assessing applications made under the SCRM Act. This policy is to be read and applied together with *Corporate Policy Statement No. 42: Planning for Land Use, Development and Permitting Affecting the Swan Canning Development Control Area*.

4. LEGISLATION

Under section 70 of the SCRM Act all development in the DCA is subject to approval and control. The term 'development' includes: physical development; any material change of use of land or waters; and any act or activities defined as development under the SCRM Regulations.

In undertaking its statutory planning role, the department typically assesses and provides advice and recommendations to the Minister for Environment regarding development in the DCA. The CEO of the department is authorised to approve certain classes of development in the DCA under section 85. The CEO is also responsible for approving other works, acts and activities declared not to constitute development or controlled for Riverpark and DCA protection by the SCRM Regulations, under a permit.

The SCRM Regulations include provisions relating to signage (Regulation 9), temporary structures (Regulation 13), and unattended vessels such as dinghies (Regulation 22A).

The CEO is authorised to grant River Reserve leases under section 29 of the SCRM Act. In accordance with section 29(4), leases must not be granted until the associated development has been approved and must be consistent with the conditions of that approval.

5. POLICY

In undertaking its statutory planning roles and functions under the SCRM Act, the department will:

Bridges

5.1 Ensure new bridge locations are consistent with the provisions of the Metropolitan Region Scheme (MRS), the local planning scheme or other relevant planning instruments.

5.2 Require applications to demonstrate that the bridge has been designed to minimise and manage effects on the floodway and the normal flow of the Swan Canning river system during flood conditions, on advice from the Department of Water.

5.3 Encourage applicants to consider aesthetics as an integral part of bridge design so they demonstrate architectural merit. Applicants are directed to the principles outlined in *Bridge Aesthetics: Design guideline to improve the appearance of bridges in NSW (2012)*.

5.4 Require bridge lighting to be fit-for-purpose so that it meets relevant Australian Standards and safety requirements. Lighting can be used to highlight the features of a bridge as a means of enhancing the amenity of the area. Where practicable, in areas of habitat or conservation significance unnecessary light spill should be minimised and lamp types selected to minimise adverse impacts on fauna.

5.5 Where appropriate bridges are to make separate provisions for vehicle, pedestrian and cycle access and enable the co-location of services such as gas, electricity, communications and sewerage.

5.6 Require bridge design to incorporate the principles of water sensitive urban design, in a manner that will enhance the environmental quality of the river system. Further guidance is provided in *Corporate Policy Statement No. 49: Planning for stormwater management affecting the Swan Canning Development Control Area* and in the *Stormwater Management Manual for Western Australia*. The design of road bridges should minimise the potential effects of chemical spills.

5.7 Require applicants to provide information about the construction methodology and ongoing management of a bridge, to demonstrate that it can be developed without causing unacceptable impacts on the river system.

5.8 Where in-river construction is proposed, require measures to be taken to minimise underwater noise and vibration and effects on marine fauna. Where

necessary, protection of fauna though the use of a marine mammal observer (or similar) will be required.

Groynes and headlands

5.9 Have a presumption against the construction of groynes unless an application demonstrates:

- the necessity for the groyne;
- that the sediment transport regime will not be unacceptably impacted in a way that affects other parts of the river system or navigation channels (for example, through changes to accretion and erosion processes resulting in changes in riverbank stability or the formation of underwater sandbars);
- that options other than constructing a groyne are not considered feasible or acceptable;
- that the size of the groyne has been minimised to the extent possible;
- the materials used to construct the groyne are based on materials and hues naturally occurring or predominantly used in the locality; and
- that adverse impacts on amenity, ecology, public access and use, flood plain and navigation requirements have been minimised.

Riverbank stabilisation and river retaining walls

5.10 Have a preference for riverbank stabilisation that uses natural or bioengineering measures to complement the dynamic nature and ecological values of the river system. Applicants should have due regard for the department's *Best Management Practices for Foreshore Stabilisation (2009).*

5.11 Require applications for river walls to demonstrate that:

- the river wall is necessary to stabilise the bank;
- the wall design is consistent with the guidance provided by *Best Management Practices for Foreshore Stabilisation*;
- the wall design addresses visual amenity and is in harmony with the landscape character of the location;
- natural or bioengineering measures have been investigated and used wherever possible;
- potential off-site impacts of constructing the wall will be minimised and managed, including accretion or erosion of sediments or banks caused by altered littoral drift and wave deflection; and
- riverbank vegetation has been retained wherever possible and opportunities to incorporate planting around the wall have been maximised.

5.12 Generally require the vertical level of river walls to be constructed at, or below, the high water mark. Applications for river retaining walls that extend vertically above the high water mark will only be supported to protect essential infrastructure.

5.13 Where an application proposes a vertical wall and the waterside boundary of the land is an irregular line, generally support the construction of the wall on a fair average straight alignment.

Car parking and access roads

5.14 Require car park applications within the DCA to demonstrate that they are necessary and their size and scale is appropriate for the location. When assessing applications the department will have regard for:

- local government advice regarding the implications on the local area;
- requirements as identified in the relevant local planning scheme and the relevant Australian Standards;
- the local / district / regional car parking needs of the location;
- capacity of existing parking facilities in the area;
- potential for, and formalisation of, reciprocal parking arrangements or joint-use parking arrangements; and
- available alternative transport options.

5.15 Require applications for car parks within the DCA to address specific design criteria, or requirements related to:

- the expected number of visitors and the nature of the associated facilities;
- universal access;
- security, lighting and surveillance;
- safe access for pedestrians and cyclists;
- native landscaping to minimise the visual impact of the car park, provide shade and contribute to ecological and habitat values; and
- water sensitive urban design (as outlined in *Corporate Policy Statement No. 49: Planning for stormwater management affecting the Swan Canning Development Control Area* and the *Stormwater Management Manual for Western Australia*) so that stormwater runoff containing hydrocarbons and other pollutants are not directly discharged into the river system without water quality management. Water sensitive urban design measures for car parks may include:
  a) porous / permeable paving;
  b) bio-retention landscaped verge areas;
  c) open or flush kerb design to allow flow into bio-retention areas;
  d) street tree bio-retention pits;
  e) vegetated swale systems in road reserves;
  f) grass paver systems; and
  g) gross pollutant traps (for space-constrained sites only).

5.16 Require applications for car parks at river based facilities, such as marinas, aquatic clubs and commercial facilities or at constrained foreshores (generally less than 75 metres wide) within the DCA to demonstrate that the parking area is set back from the high watermark as far as practical. For other car parks, where the width of the foreshore is relatively unconstrained (generally greater than 75 metres wide), the parking area and associated access road is to set back no less than 30 metres from the high watermark.

5.17 Where a proposed car park is likely to cause traffic issues, congestion or detract from the amenity of the surrounding locality, require a traffic management report, prepared by a suitably qualified consultant, to be prepared to support the application.

5.18 Require access roads within the DCA to be located and aligned to consolidate and maximise the effectiveness of public open space. Access roads should also safely accommodate other users by providing cycle lanes and pedestrian crossings where appropriate.

Boardwalks and pathways for pedestrians and/or cyclists

5.19 Require applications for boardwalks and pathways to demonstrate that they are consistent with an endorsed precinct or foreshore management plan for the area (or if there is no such plan, provide a public benefit and be consistent with the policy statements for parts of the river set out in SPP2.10 and the *Land and Waterway Use Plan*). Facilities are to be safe, provide convenient access and be developed as part of a structured hierarchy of connected access ways. The following matters will be considered when assessing applications:

- pathways and boardwalks should provide the public with the opportunity to conveniently and safely view and use the river system without impinging on informal access to foreshore areas and the river edge;
- dedicated cycle ways designed for faster-flowing traffic should, where possible, be separated from pedestrian pathways. Where possible they should be set back from riparian areas or located along side adjacent roads;
- pathways and boardwalks designed solely for pedestrians may have a variety of surfaces depending on the local context and may be constructed close to the river, including areas landward of fringing riparian vegetation;
- existing uses in a locality should be considered and there will be a presumption against pathway or boardwalk proposals that adversely affect appropriate existing uses;
- alternative locations, alignments or less formal means of public access will be required if a pathway or boardwalk proposal is likely to cause unacceptable impacts on the ecology or amenity of the river system;
- the provision of universal access should be considered and addressed in any application for a pathway or boardwalk; and
- appropriate signage or other visual means should be installed to identify pathway or boardwalk use (i.e. pedestrian, cycle or shared) as necessary.

5.20 Where appropriate, require pathway design and construction to comply with *Australian Standard AS2156.2 Walking Tracks – Infrastructure Design* and *Australian Standard AS1428 Design for Access and Mobility*. Pathway design should ensure that stormwater run-off does not result in erosion, and earthworks undertaken as part of construction should be minimised. Boardwalks are to be certified by a practising structural engineer and comply with relevant Australian Standards.

5.21 Construction materials and colours of pathways and boardwalks should be selected to complement the local character of the river system.

5.22 Require applications for pathways or boardwalks to demonstrate that the relevant vested authority supports its construction. The department will not accept responsibility for pathways or boardwalks unless it is the managing agency for the reserve in which the path is constructed. Boardwalks constructed over the River reserve will likely require an ongoing management and maintenance agreement with the organisation or body that was responsible for its development.

5.23 Generally not support the development of a boardwalk over water where an alternative land-based access option is available or will soon be available.

Landfills

5.24 Not support the development of landfills immediately adjacent to the Swan Canning river system or its tributaries. The department may support the development of landfills in the broader Swan Canning Catchment if they are constructed to ensure leachate is contained on site and in accordance with the requirements of the Department of Environment Regulation (DER). The department will not support the development of landfills in the Swan Canning catchment where there is a risk of contaminants entering groundwater and/or surface water bodies the discharge to the Swan Canning river system.

5.25 Require proposals for land use changes and applications for development on sites historically used as landfills to demonstrate that the site will be remediated in accordance with the *Contaminated Sites Act 2003* and to the satisfaction of the DER, and managed to minimise the mobilisation of nutrients or contaminants from the site to the river system.

Fuel storage

5.26 Require applicants to demonstrate that the design, installation and operation of fuel storage facility in the DCA is consistent with the relevant Australian Standards and the requirements of the Department of Mines and Petroleum (DMP), including the *Storage and handling of dangerous goods code of practice (2010).* Applications should detail measures to minimise and manage impacts of spillage or leakage on the river system. The decommissioning of fuel storage facilities also requires approval.

5.27 Have a preference for upgrading and replacing existing fuel storage facilities rather than providing additional facilities as this will help prevent their proliferation in the DCA. Applications for new fuel storage systems in the DCA are to demonstrate that they are necessary and pertinent to the river system.

Sullage pump-out

5.28 Typically only support applications for new sullage pump-out facilities in the DCA where they are based within a marina or yacht club. For further information see *Corporate Policy Statement No. 43: Planning for Marinas, Yacht Clubs and Aquatic Clubs in the Swan Canning Development Control Area*.

Signage

5.29 Require applications for signage in the DCA to demonstrate that they are providing a public benefit and minimising effects on the river system's landscape character and amenity. Applicants will likely be required to provide information and details regarding the signage, including:

- size, height and shape so that it will not dominate the surrounding landscape. The department has a presumption against above-roof or skyline signage and billboard advertising;
- materials and colour scheme so that it considers the context of the river setting and the characteristics of the site;
- quantity so that amenity is maintained and clutter is minimised. The department encourages co-location of signage and the use of common support structures wherever possible. It has a preference for applications that consolidate and reduce the total number of signs in a locality;
- illumination (neon advertising or flashing illumination may not be supported);
- content and design so that: the purpose of the signage is pertinent to the river system and approved developments, works, acts or activities in the DCA; the signage does not include excessive, unrelated product advertising or irrelevant corporate symbols; and the signage uses symbols and graphics to convey information with minimal wording; and
- maintenance requirements.

5.30 Require applications for signage in the DCA to demonstrate that they are safe and minimise adverse effects on community use. Applicants will likely be required to provide information or details regarding signage location so that it does not impede public access, maritime or vehicle traffic safety, or emergency access.

5.31 Have regard for adopted signage guidelines in identified commercial precincts within the DCA (e.g. Barrack Square).

5.32 Only support the display of permanent sponsorship signage or signage associated with a sporting or cultural event in the DCA where the signage is displayed within an identifiable premise or lease area. Permanent signs are to be faced internally to the premises so that the face of the sponsorship signage is not primarily visible from areas outside the venue and be a maximum size of 1 metre vertically and horizontally.

5.33 Support temporary sponsorship signage or signage or banners associated with a sporting or cultural event where it is displayed within or immediately adjacent to an identifiable premise or lease area. Signs and banners are to be displayed when the event is underway, and if related to sporting club activities, only displayed when members of the club are in attendance at the premises, and in a form that can be easily removed on a day to day basis. Signs are to be a maximum size of 1 metre vertically and horizontally and the height of a banner is to remain under 2.5 metres.

Telecommunications infrastructure

There is a presumption against the development of telecommunications infrastructure within the DCA due to the area's environmental significance. Telecommunications towers should be located within commercial, business, industrial and rural areas and outside identified conservation areas.

In assessing telecommunications infrastructure, the department will:

5.34 Implement the WAPC's *Statement of Planning Policy No. 5.2 Telecommunications Infrastructure*, which requires telecommunications facilities

to be designed and sited to minimise any potential adverse impacts on the character and amenity of the local environment, prominent landscape features, views, areas of natural conservation value, and places of heritage significance.

5.35 For telecommunications infrastructure proposals adjoining the DCA, encourage the co-location of facilities and the implementation of measures to minimise visual impact.

Dinghy, tender or small vessel storage facilities

5.36 Support the development of dinghy, tender or small vessel storage facilities in the DCA where:

- there are limited opportunities to provide alternate approaches or structures such as dinghy, tender or small vessel launching facilities;
- they are not the predominant use on the foreshore; and
- they do not unacceptably restrict public access, have unmanageable ecological impacts or unreasonably affect the amenity of an area.

5.37 Where dinghy, tender or small vessel storage facilities are proposed, consider the impact on the river system's ecological health, amenity and public access. The design, size and location of the storage facility should respond to demand while balancing other Riverpark user needs. To minimise visual and environmental impacts, the amount and size of infrastructure installed to secure vessels to the foreshore should be minimised. Bollards or similar low key facilities will typically be supported. Storage racks will likely be supported in circumstances where there is already significant development such as at a yacht club. Reference should be made to *Corporate Policy Statement No. 43: Planning for Marinas, Yacht Clubs and Aquatic Clubs in the Swan Canning Development Control Area* for further information and requirements.

5.38 Likely support new parking areas and access facilities for small hand trailers to enable boat owners to launch dinghies or tenders to reach their vessels in areas with limited ecological value adjacent to mooring sites, where dinghy, tender or small vessel storage is limited or not provided.

5.39 Provide advice to applicants and land managers in the Riverpark on management systems for dinghy, tender or small vessel storage facilities.

Co-location of infrastructure

5.40 Where practical, require co-location of infrastructure crossing the river. Services such as powerlines, gas lines, fibre optic cables and telephone lines should be co-located beneath the river system or on bridges crossing it to minimise environmental and visual impacts and reduce the likelihood of possible conflicts with river users.

Fireworks displays and lighting installations

5.41 Only support fireworks in the DCA if they do not unacceptably impact on the amenity of surrounding land uses. Matters such as noise, traffic management and event organisation will likely require consideration.

5.42 Require measures to be taken to minimise debris or litter from fireworks from entering the river system, including the shortening of fuses and anchoring of

fuse-head wires to contain debris in the firing area, and inspections of the firing area after the display to collect debris. The department supports the use of paper-coated fuses, rather than plastic-coated fuses.

5.43 Advise proponents to obtain other relevant approvals prior to a fireworks display, including a fireworks and display permit from DMP, and contact DoT to ensure that issues of navigation and marine safety are adequately addressed.

5.44 Where necessary, require applications for lighting installations to demonstrate they are minimising light spill to areas within and immediately adjoining the DCA so that fauna, community enjoyment and visual amenity are not unacceptably affected. In this respect, encourage applications to implement the *Guide on the Limitation of Effects of Obtrusive Light from Outdoor Lighting Installations* (2003).

Other miscellaneous structures

5.45 Require applications for other miscellaneous structures or facilities to demonstrate that the structure is pertinent to the river and maintains or improves public access; community use and enjoyment of the river system; the visual amenity and landscape character of the river; and views to and from the river. The long term health and natural ecosystem of the river is to be protected and enhanced where possible.

6. POLICY IMPLEMENTATION STRATEGIES

To implement this policy department will:

Swan River Trust

6.1 Consult with the Swan River Trust when assessing applications under Part 5 of the SCRM Act and preparing strategic documents and corporate policies and guidelines.

6.2 Keep the Swan River Trust informed of development, including permitted works, acts and activities approved within the DCA.

Planning authorities (Department of Planning, local governments and redevelopment authorities)

6.3 Regularly consult with relevant planning authorities when providing advice on planning applications and assessing development and other permitted works, acts and activities in and around the DCA.

Referral agencies

6.4 Ensure there is a clear understanding of the role of referral agencies, how their advice will be considered in assessing applications and ‘clearing’ conditions of approval.

Assessment of applications

6.5 Seek appropriate advice when assessing applications. Advice may be sought from planning authorities, referral agencies, contractors, consultants, or other stakeholders and from the department’s specialist branches and regional locations. Where expertise is available from within the department it will be utilised prior to seeking advice from external parties.

6.6 Ensure relevant staff, contractors and consultants have the necessary qualifications, skills and expertise when assessing planning and development applications.

6.7 Maintain records of discussions, advice and decisions when undertaking the department's statutory planning roles with respect to the SCRM Act in accordance with the *State Records Act 2000.*

7. CUSTODIAN

Director Rivers and Estuaries.

8. PUBLICATION

This policy will be made available on the department's website and intranet.

9. KEY WORDS

Swan, Canning, river, Development Control Area, bridge, groynes, headlands, car parking, access road, pathway, cycle access, boardwalk, landfill, petroleum storage, sullage pump-out, signage, lighting, telecommunications infrastructure, fireworks.

10. REVIEW

This policy will be reviewed at the discretion of the Director General, with a review undertaken after five years.

11. SWAN RIVER TRUST ENDORSEMENT

Endorsed by

Hamish Beck
CHAIRMAN

Date: 27 June 2016

12. DIRECTOR GENERAL APPROVAL

Approved by

Jim Sharp
DIRECTOR GENERAL

Effective date: 27 June 2016