Public Value Management 360®

PUBLIC VALUE MANAGEMENT

Institutional Design for Dialogue and Decision

A collection of papers and discussion contributions from a roundtable discussion held at Westminster in November 2019

Edited by Dr Stephen Haraldsen

September 2020

SAMUEL LINDOW FOUNDATION

1828 University of Central Lancashire UCLan

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Foreword

Professor Graham Baldwin, Vice-Chancellor and
Chair of the Applied Policy Science Unit Advisory Board, University of Central Lancashire

In recent years both the UK Government's Treasury and Cabinet Office have both highlighted the weakness of money as the sole measure of value and have signalled the Government's intention to assess activities on a wider 'public value' basis. As a University, we are acutely aware of this challenge as the benefits a University provides to students, staff and citizens at, regional, national and international levels are diverse and widely disseminated. and lin demonstrating the value that we provide it is very clear that money alone is not a true measure. Increasingly we need to look at wider, public value outcomes to fully appreciate our contribution to the common good.

This project is a great example of innovative research for the real world – at the heart of UCLan's research strategy. It is leading to change in the understanding and awareness of public value in collaborator organisations and is having an impact upon practice and public policy at home and abroad. I'm pleased to say that UCLan is itself beginning the application of public value tools and techniques, so I guess that we're practising what we preach!

This brochure reports the proceedings of a round table event held in November 2019 which discussed and disseminated the activities of our current collaborative research project into Public Value Management. This project is being undertaken under the auspices of our Applied Policy Science Unit within our Lancashire School of Business and Enterprise. That event provided an opportunity for our collaborators to meet, share the results of our research and discuss its implications with members of the wider policy community. It also helped us enormously to get a firmer grip of the representation and implementation of this far-reaching and complex topic. The event we report in this document stems from a genuine partnership between UCLan and our collaborators, the Nuclear Decommissioning Authority, the National Nuclear Laboratory, Sellafield Limited and the European Space Agency. Without their active engagement and access this applied project would not have been possible. I'd also like to thank members of our Applied Policy Science Unit for their guidance and encouragement to our team who continue to develop and apply this innovative research and the Samuel Lindow Foundation for supporting this work.

Introduction

Dr Rick Wylie, Reader in Applied Policy Sciences and
Executive Director of the Applied Policy Science Unit, University of Central Lancashire

Today, more than ever before, the realisation of public value is an important goal for Governments and for organisations in all sectors. In an era of globalisation, systemic interdependence between sectors, states and citizens, and as the global implication of human activity becomes ever more evident public value represents the humanisation of policy and practice. In an era of sometimes global crisis and complexity it represents the 'voice of the side effects' and the democratisation of public policy and commercial practice. For Governments, investors and citizens, public value is also a key factor in the assessment of organisations and their activities, especially those in receipt of public funds and those requiring a 'licence to operate' across communities and countries.

The body of research, of which this round table event is a part, is creating a framework of tools and techniques to recognise and realise the wider value of an organisation in the public sphere – its contribution to the common good. The key feature of public value is its foundation of human values, which we all hold (though perhaps in different priorities) and the appreciation of this by professionals and policy makers is an early outcome of this project and this round table event as we share public value profiles of collaborator organisations who, for the first time, can see the scope and scale of their wider contribution to the public sphere and which may bear upon and provide value to individuals in their daily lives. This project is now leading on to how organisations may work with public value in the policy communities and commercial markets within which they operate and within the public sphere in which we all live.

Chair's Opening Remarks

Lord Liddle of Carlisle, Co-Chair, Policy Network

Hello and could I just say on this occasion what a pleasure it is that I'm chairing this event. My name is Roger Little and I'm one of the co-chairs, with Dr Patrick Diamond, of Policy Network.

We spend most of our time having events and relationships with continental think tanks, so it is a very interesting relationship with the Applied Policy Science Unit from the University of Central Lancashire, based at their Westlakes campus in Cumbria. You might say that as a native Cumbrian, Cumbria's as far away as many of the continental places which we have been to over the years, but it is a great pleasure to be co-hosting this event. So I think I ought to thank right at the start the people who have made it possible, an educational charity which is based in West Cumbria, called the Samuel Lindow Foundation, and its trustees, several of whom are with us today, and also the University of Central Lancashire, which in a very bold move established a campus on the west coast of Cumbria, which is probably in England one of the most difficult places to get to in the whole country, as the former Member of Parliament for Copeland who is with us today will no doubt testify.

The Applied Policy Science Unit has been going on for some twenty-five years, but the current project on public value has only been going on for the last three or four years. And the people who have worked at it are Dr Rick Wylie, who leads the work and who we are going to hear from and Dr Stephen Haraldsen who is a Research Fellow working on the project, so it is their joint work. The think tank in West Cumbria has basically devoted its energies to work on the social and economic issues that particularly affect that part of the world. I do not know how many people have actually been to that part of the world but it combines the most wonderful scenery in the distance in the Western Lake District, with some of the greatest industrial decline and social deprivation in areas that were once iron, steel and coalmining communities, together with being the home now of the British nuclear industry. And over the years, APSU has worked on relevant questions like regional policy, infrastructure, investment, how to think about the concept of community and the economics of tourism. And it's also got involved in questions of health and social inclusion, particularly as they affect West Cumbria.

Today Rick will talk about their current project. Public value is an attempt, I think, to do two things.

Firstly, there is a move in society that, instead of just looking at things in terms of the price of everything and the cost of everything, we have to take account of human values more in the way that we account for the success of our society. That requires change in the governance structures of how we manage public investment and public spending. I think it is a good time to be looking at these questions because clearly there is a cross party consensus, and that's a very rare thing to say about Britain these days, but I think there is a cross party consensus that we need to re-think the economic model under which we have been operating since the 1980s.

There is also another interesting element of cross party consensus, that we need to raise considerably the rate of public and private investment in the UK. And that requires thinking about how we assess the value of that investment and Andrew Adonis is joins us and he probably knows more about that subject than anyone else. Anyway, we also welcome here Rick Wylie of APSU, who leads work on this project, partners from the nuclear industry in Cumbria and North Scotland, the Nuclear Decommissioning Authority, Sellafield Limited and the National Nuclear Laboratory. Also, interestingly, the European Space Agency, which adds a dimension of a very different kind to this occasion.

Public Value Management: Institutional Design for Dialogue and Decision

Dr Rick Wylie, Reader in Applied Policy Science and
Executive Director of the Applied Policy Science Unit, University of Central Lancashire

It seems like we are in an era of big issues and little trust. Years ago, Ulrich Beck said we live in a world risk society, dominated by anthropogenic risks and by anxiety, in which at any stage social unrest might upset the apple cart of politics. Reflecting a distrust of Government, politics and politicians, at the moment we see demands on multiple issues, from Brexit to climate change, for 'Citizen's Assemblies' outside the structures of formal, established politics and democracy. We are in an era of big issues, failures even, such as economic cold-spots, patchy healthcare and education, deep inequality, and so on, which are seen particularly in peripheral communities such as coastal towns. These communities face a more basic and fundamental threat than a declining social capital, they are 'bankrupt' communities that have no financial capital. This, to greater or lesser extents, includes places like West Cumbria and Caithness, which are the subject of some of our research and reported later. So, there are some clear imperatives for a wider look at what is value and what is valued, and how that can be researched and reflected in policy.

Public value is of increasing salience in policy. The Treasury Green Book no less states that you can't infer value simply from market prices. In the foreword to 'Delivering Better Outcomes for Citizens' report (the Barber Report) which was commissioned by the Treasury, Elizabeth Truss who was Chief Secretary to the Treasury at the time said, 'if we can't measure results, people will talk about what they always talk about, and that is money'. She goes on to say that 'we need to track how we turn public money into results for citizens'. And that is a fantastic capsule definition of what public value is, results for citizens.

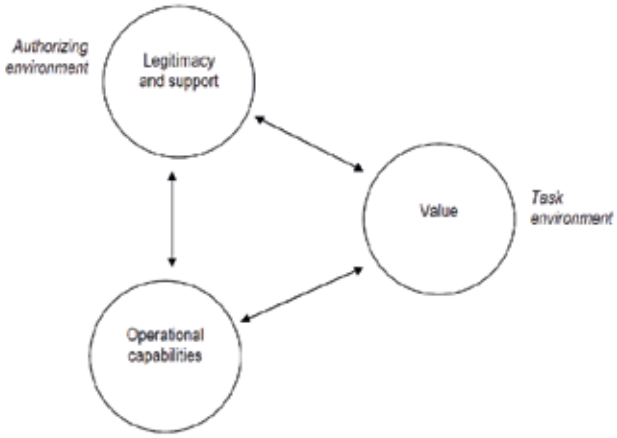


Figure 1 – The Strategic Triangle

One of the high priests of public value management, Mark Moore, produced this strategic triangle of public value areas, with three key areas for public value management:

- Legitimacy and support;
- Operational capabilities of an organisation, be it public, private or social sector, he was writing about the public sector, but public value is created by any organisation; and.
- Value in the environment, what value are you actually creating?

The long and short of public value management is you are addressing all these things simultaneously and that is an important driver. Interestingly however Professor Moore did not actually define public value in a crisp, concise way in his book.

The first part of this paper will quickly summarise some of our work in terms of value, particularly how do you measure, monitor, maximise and even describe what public value actually is?

Value and values

Essentially public value is what is of value to the public, measured at the level of the individual citizen. The nice thing about public value from a political science standpoint is that it brings the public into the policy and governance processes. It relates the public, people, citizens, consultations, into the policy process and reflects at a very human level the realisation of human values, needs and motives in policy and practice.

Human beings are social creatures, and it is reflecting the sociality of our existence that helps us understand and get a grip on this thing called public value. There is a duality in public value descriptions, concepts, discussions and the literature, in terms of the common good for the public and the individual. Our working definition of public value is what is of value to the public perceived at the level of the individual citizen as a human being, but within their social setting. The social setting, the public, is very, very important, but it is the individual who decides what is valuable, while living in, contributing to and drawing upon a wider context. Thus, a focus on public value helps to maintain or enhance the favourable experience of community, which helps individuals develop and grow.

Public value has a key role for an organisational mandate, we found several our collaborators are very concerned about their loss of mandate if they fail to demonstrate public value. From an organisational standpoint, it looks at their activities from the point of view of society, and it really asks the question, is it perceived as valuable by society at large? Do people get the value you are creating from what you are doing? And what is the public benefit accruing from those activities? This potentially has an impact on organisations 'license to operate'. Not a bit of paper saying 'there is your licence to operate, off you go' but rather the context of support around the organisation.

Can a public value profile help an organisation secure wider public appreciation and legitimacy, and can a good public value profile be relevant and defensible publicly and politically? In other words, can a public value profile help prove an organisation's contribution to the public sphere. Indeed, one of the most important things in discussions of public value is this thing called the public sphere, it is where we have been living this whole time. The public sphere is both a setting and a structure. It is a setting for our communication, our collaboration, our contributions, but it is also an enabling structure, a social structure in which we deliberate about collective action relating to public values. Public values, in a sense, are those things which are of value for the public, but also values derived by citizens' relationships involving the public and value drawn from the actual experience of the public itself. It is specifically about the actual value we derive as citizens, but also value drawn from the actual experience of the public, of being a member of the public.

The public sphere is particularly important when one considers that the public value generated by an organisation, which may go undocumented and unacknowledged, can have a positive impact upon many citizens without a direct relationship.
This is where we live, and it is no more elaborate or sexy than that that. It is where we live our everyday lives, we are part of the public, we contribute to it constantly through what we do, and from an organisational policy standpoint, from what it does. Our approach to public value, working with our

collaborators, is to recognise that individuals draw value and contribute value to the public sphere. This is a two-way, dialogic process. Our work really looks at the impact of a policy, a project, a programme or an organisation, or whatever, on that relationship. Does it add to or does it detract from the realisation of value, the acquisition of value, and the contribution of value by individuals to the public sphere?

To understand this though, it is first necessary to answer the question 'what do the public actually value'?. Mark Moore argued that public managers create public value, but we go a bit wider than that to say private managers as well can and do. The problem for Moore's approach is that those managers cannot know for sure what that is, and that is a big problem when you are just doing public value research with large organisations. Timo Meynhardt was a little bit more specific, arguing that organisations can only create value for individuals and for society if they respond positively to individuals' basic needs. This psychological approach is what we draw upon in our research.

Human values are at the absolute core of a public value understanding. Unfortunately, for research involving values, these things are invisible. We cannot take them out, examine them, polish them up and put them back in. Values are an essentially human process, and these are from our take on public value, working with our collaborators. Despite being so elusive, these things are the guiding constructs in our lives, conceptions of the desirable, they are portable, they are beliefs on which we act by preference; freedom of expression is a good thing, conservation of the national environment is a good thing, I will act to pursue those. Unlike an attitude which just relates to a particular object, values are enduring but they are not completely static, and they are shaped by background and context. This is an important element of thinking about people's values.
This is a view of Frank Street in Gateshead about 1960, just before the slum clearances. The Felling Bypass now goes through the middle of where this was. It is where my mother was born and brought up and her background always drove her to achieve. Her values were shaped by where she came from, by her context, and she never lost that through her life.

The elephant in the room in values research, people never say Maslow because everyone has heard it and everyone thinks it is a little bit trite and shallow and you are not being particularly academic, but he had a point. Maslow's work really was not empirically based early on, but nonetheless he absolutely got it right when it comes to basic human needs. Maslow argued, in I would say a sort of limited model, that there were five human need categories, but that we are all different. There are, as mentioned, a number of approaches to categorising human values, but these are secondary and indicative of basic needs, drives and motivations.

The simplest model of value that we use comes from Clayton Alderfer, in which he argued that there were three broad categories of value, existence, relatedness and growth, and you could categorise human values into these three areas. When you look at a slightly longer version of the Maslow hierarchy, ending with social actualisation, they map on to Alderfer's three categories. The same can be done with the ten or nineteen value categories of Shalom Schwartz, as seen in figure 2. In a sense they are doing the same thing, describing the same context, but at a slightly different level of analysis. What interesting though is that existence, relatedness

Picture Courtesy of Gateshead Council Archive Services'

and growth theory, Alderfer argued that there was a prioritisation between them, such that once you have existence needs satisfied, you move on to relationships, and then you move up to growth needs as you get on, as you become more confident in your existence and relatedness needs being met. The prioritisation of your values 'set' can change over time.

In a similar vein, one of the authors that we found very useful for categorising human value interactions by organisations is the work of Ronald Inglehart, and the dynamic and motivational concept of post-materialism. He argued that people have a value hierarchy relationship with two categories, material values based on personal security and physiological needs, again using the terminology from Maslow, and that once people had acquired, become more secure, felt more safe, they move on to higher-ordered goals that they pursue in their daily lives; they move from the world of concern about poverty and material goals, to a context of plenty, and a concern with post-material values associated with freedom, self-expression, achievement and quality of life. You can map Inglehart, Maslow and Alderfer, and it has that same dynamic, so there is a dynamic in human values – we are striving for more, we are wanting to get on.

The theorisation and categorisation of human values that we draw upon is from the work of Shalom Schwartz. There are up to 19 value categories in the Schwartz theorisation, which has been empirically tested hundreds of thousands of times in many contexts across countries. It is the leading edge in values theorisation. Schwartz' conception of value categories, with the 10 categorisation model shown in figure 2, is to use a rather academic term, a circumplex. This means that in that circular representation the values adjacent to each other, such as power, achievement and security, are related but values on the other side of the circumplex, such as universal, benevolence and self-direction, are quite different and distinct from achievement, power and security. However, Alderfer argued that there was no priority between values.

Figure 2

The innovation in our approach is to map together the 'circumplex' approach of Schwartz, with the directional tendency of Inglehart. So while there might be ten value categories from Schwartz, you can actually look at them very simply in terms of those people striving for affluence and achievement and those concerned more about acquisition and being anxious in terms of getting those 'goods' and keeping that 'good'.

As an example of some interpretation using value categories, we can take our work with the European Space Agency and their 'Space for Earth' programme and look at this in terms of the basic values they help to address. This is just an example of how values, what appear to be very abstract concepts, can be used and have a meaning. You can frame things using these concepts and categories. The ERG model of human needs – existence, relatedness and growth – is a very accessible way to view projects in terms of needs and values.

Looking specifically at three ESA projects by way of illustrating this application of values, with one each in the three categories:

- **Existence** – Earth Observation, involving mapping, climate observation, and activities which help monitor crops, weather and other activities with a direct application to the safety and security of people on earth.
- **Relatedness** – Communications, such as the Alpha Sat, one of the largest public/private space projects ever in Europe, enabling the connection of people.
- **Growth** – Deep space observation, such as the Jupiter Icy Moons Explorer (JuIcE) scheduled for launch in 2022, exploring the Jovian system and expanding the frontiers of human knowledge, advancing our understanding of the cosmos.

These complex projects can therefore be viewed quite simply, and in a way very easily understood to the citizens of the funding nations, in terms of their contribution to those three basic categories of human value.

Operational capabilities and capacities, legitimacy and support for public value

Barry Boseman and some of his colleagues produced and mapped out the structure of what they called a public values universe, and within an organisation these coalesced. These public values include things such as human dignity, citizen involvement, openness, secrecy where required,

robustness, integrity and the ability to compromise. They argued that these were important element in an organisation, the values in an organisation, which he called public values, to help an organisation operate. Our fieldwork to date with colleagues shows to us that these internal processes are key to public value.

Individuals and organisations face, in our globalised world, complex challenges which evade simple solutions. They exist in nested policy contexts, in complex issue levels and complex issue networks, and it is very often difficult to disentangle. In order to make sense of this complexity organisations need a framework - public value management. This framework can help organisations manage the multi-level environments they may operate in and across.

In all of this, the local level is vital, as are relationships between local, national and international levels. In a stakeholder society, which it is argued we live in, horizontal links with stakeholders are important, particularly involving public spending, at a time of flux and dynamism and change and uncertainty, as are vertical links to help an organisation with its mandate and resourcing and getting that all renewed.

So, in our networked age, we come to the institutional design for dialogue and decision. One of the tools we are using and beginning to adapt is the Institutional Analysis and Development (IAD) framework, for which Professor Eleanor Ostrom got the Nobel Prize for Economics some years ago. It is very powerful, without going into the detail as it is based on a huge amount of literature, but the point is there is a focus on the individual, there is a focus on interactions, and crucially there is a focus on outcomes and public value is about outcomes, not outputs. For example, the output might be a road but what is the outcomes, what is the public value of that road? Not to say one supplants the other, but we are looking here at outcomes.

Also, IAD can be used flexibly giving a flexible definition of where the action is, this thing called the Action Arena. It is also heavily values based at multiple levels, but also there is a fundamental relationship with public value and human values. So both inputs into the process, human values and public values, and the evaluative criteria that organisations use and individuals and the media, on behalf of people, use to actually evaluate policy activities.
Figure 3 is a slight redraw, with on the left-hand side the contexts, such as the administrative context, the physical environment in which we live and the cultural context, the community in which organisations and individuals actually exist and so on. The next box to the right, the action area and the actors, is where we put our model of value orientations. There are interactions at the top right. Now, when we come to outputs and outcomes, this is where we have slightly adapted Ostrom's model by distinguishing outputs from outcomes. And on the right-hand side of the diagram there, the evaluative criteria, is where we explore who is evaluating what people and organisations do. In this, the interactions themselves are evaluated as well as outputs, and crucially for us, as well as outcomes. Therefore, all three of these things – interactions, outputs and outcomes – are valued.

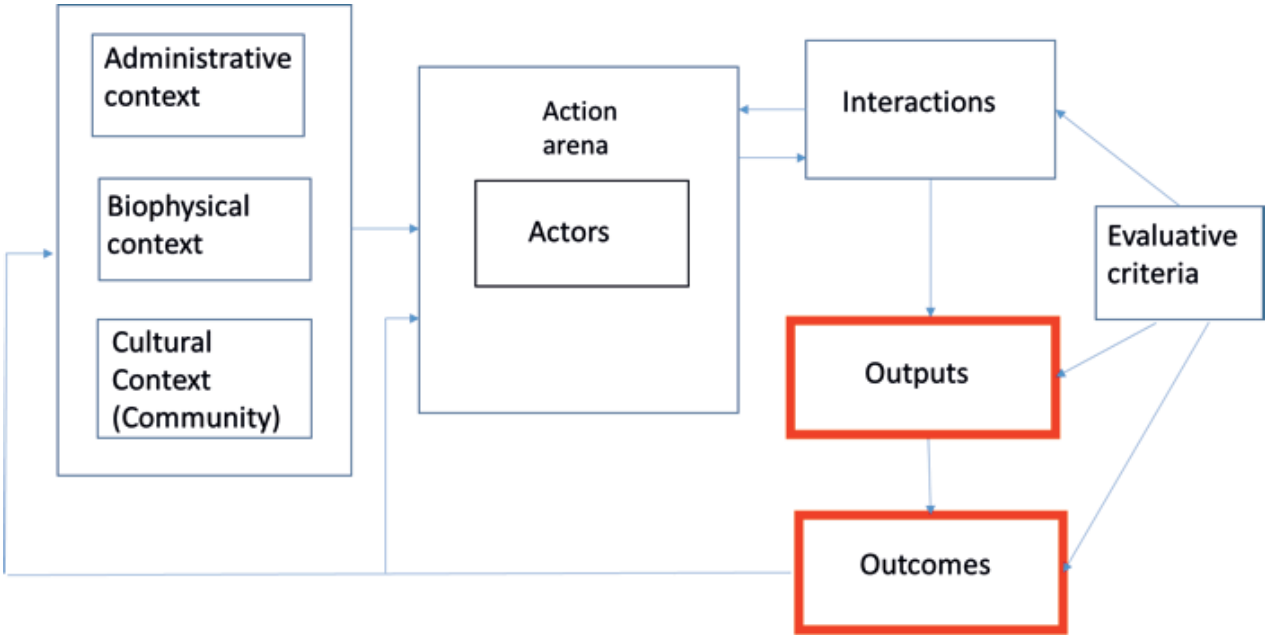


Figure 3 – The Institutional Analysis and Development Framework (modified)

It is helpful at this point to think a little more specifically about outputs and outcomes, and the distinction between the two, because it is important for a public value perspective. For a good example of this, we go back to space.

Space 1.0 was the study of space and astronomy, famous astronomers such as Copernicus and Kepler. Space 2.0 was when nations ventured into space, culminating with the Apollo programme and Moon Landings. The Apollo programme, starting with US President John F Kennedy's speech on 25th May 1961, 'we chose to go to the moon in this decade and do the other things', became a huge endeavour, with the biggest spending of any Government in peace time. It involved over 20,000 industrial firms and Universities and almost half a million people worked on the project. It created public value but it is the limit case example of a the distinction between outputs and outcomes. As JFK wanted, the US got to the moon first and were in a position second to none, winning the Cold War in space. However, before that Apollo 11 mission there was the Apollo 8 mission to orbit the moon, which on Christmas Eve 1968 sent back the first live televised pictures of the Earth and the Moon. These mission were planned and scripted to the very last detail, yet one of the enduring outcomes of the Apollo programme was not in any mission plan, and it became perhaps the most famous photograph in the world, the Earth rise shot by Captain Bill Anders from Apollo 8. It was completely unscripted and they just saw it and they took it, that unintended outcome kick started the environmental movement, and it is the enduring image of the Earth, the blue earth, the space ship Earth foregrounded by the barren, desolate, inhospitable moon.

Using the IAD framework, we find that public value evaluation is one of the key initial drivers of an organisation's public value management process. What is our public value profile? Or what is our value profile perceived by members of the public? Using perceptions of public value outcomes as we do, we recognise an appreciation of public value and values as a basis of the evaluation of the activities of an organisation. How does an organisation deliver value? Does it deliver value? Does it deliver more of this value than that value? Or, and crucially for the organisation itself, my God, we do make value in this way, we should promote and proselytise that we actually do in this!

In addition to outputs, as mentioned earlier, interactions with networks are evaluated and can be of value. People like being involved, with processes such as public consultation, as long as they're not fatigued by consultation as can be the case in some policy areas. What one author termed 'Uncle' – unlimited consultation leading to exhaustion

(Johnstone 2018). In those relationships and processes of interaction, the public values outlined near the start of this piece are important. Those public values relationships, between organisations and politicians, organisations and citizens, draw upon the behaviour of employees', operating practice and protocols and what we would call a public value orientation of that organisation.

a wider perspective is needed, and we need that level of analysis at which the space programme and space activities operate. Now this is not to say all organisations need to have a presence and profile in space (or even international or national), but it is a nice way segmenting and unpacking the relationship between different policy levels and organisations. The IAD framework is a way

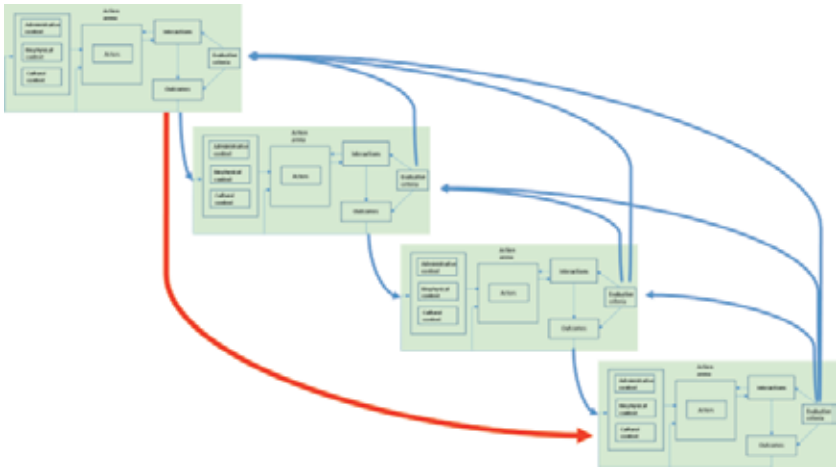


Figure 4 – Multilevel IAD frameworks

The linkages between levels are important in the public sphere, recognising the globalised multi-level world that we actually live in. Taking Ostrom's little diagram, as seen in figure 3, you can see those representing the local and national levels. These are just levels of analysis that one could actually look at for a particular policy, organisation, profile or footprint. This approach to recognising explicitly the linkages and levels gives a perspective on the crucially important link between the outcomes at one level, in this case the outcomes at the national level, and the inputs into the lo the local level and the different perspective on evaluation at each level.

All this happens in the public sphere, and the thing to remember about the public sphere is that it is a pretty big space. We do live in a globalised, multi-level, complex, dynamic, fluid, call it what you want, threatening world. A world risk society if you will, and these levels are very important, and consequently we can add in in the international level. And at each of these levels has an impact on the other level. Climate change is a good example of that, how people evaluate activities at different levels of analysis, from global issue to local action in the parlance of the old Agenda 21 'think global, act local'.

However, there is another level to add beyond international. In terms of issues like climate change, of thinking about how these levels and links all interact and intersect and unpacking this into very measurable, into very value focusing dimensions.

Conclusion

In review, we believe that public values are dynamic, multi-dimensional concepts, not just about values, but also about structures, people and process as well as policy organisations. The overall emphasis of it is on outcomes, not just outputs. Crucially its realisation ultimately involves a plurality of actors working across many scales, particularly for large scale organisations and in fluid network forms of institutional design, increasingly the focus is on public values, particularly the relational element of coordination between organisation which can itself be a value. Partnerships and networks are valued, they can in themselves provide public value. Engagement is a valued outcome. Casting back to the straightforward conception of value – ERG – relations are a value category. In adding value to the public sphere, crucially it foregrounds the community level. We all live locally, we all live in communities, we exist physically at the local level. Of course, with the internet, thinking about big issues, CNN, multi-national news, all of these sorts of things, we live in a globalised world. But at the end of the day, the many of these interactions and decisions happen at the local level.

Questions to Dr Rick Wylie

Q1 - Having worked on the AlphaSat programme, my question is around evaluating, measuring public values because it looks like the sort of thing you can interrogate very well afterwards, but you can not necessarily specify very well up front, aside from your comments about taking account of the fact that it might be important. And this is very, very challenging and particularly when you involve projects like, for example, Alpha Sat, where you're likely to achieve some social benefits or create some public value and you'd like to be accountable for all of that, and you're putting in taxpayers' funds, so you should be, but how do you really think about creating a framework which allows the public money to be created in the chaotic way in which it is?

Very good question. Certainly in terms of what we've been doing, we've been measuring the public value of something in the public domain as perceived by ordinary citizens after the event. But when moving to establishing a set of criteria, which based upon human value categories and models that we could actually relate something to a series of value propositions and value categories. The simplest being existence, relatedness and growth, or material and post-material, but from the literature we can unpack those into ten, nineteen and ultimately thirty-six value categories. One could see how a project could be perceived in a way that is consistent with, and then presented, promoted and positioned in a way that is consistent with value orientations. The public value, in the public sphere there are no public values only human values, and the nice thing about the literature on human values is that they are quite detailed, quite specific, as I said the ultimate one was thirty six and that's what we could do. So we could actually look at a project or a policy or a programme or satellite or a contract if you want to say which elements of that have value in which categories and which value categories does this particular project address? So it is very doable.

Q2 - I was intrigued, and I found your presentation fascinating. I'm intrigued as to why you didn't refer to planning at all or to the trilogy of economic, social and physical, environmental, because there's a whole world which concerns strategic voices I think would use those terms, and they seem directly relevant to the question of value.

Yes, absolutely. It is work in progress. We are starting with the public value profiling, which we'll come on to in the next session of this. As we work more closely and fully with organisations, the challenge is to relate public value to these other types of value. It's not the whole answer to everything of course, it is a dimension of value. But it does relate these things to human values, in a way that some of the other types of value aren't explicitly related to human value. So the short answer is yes, we will be moving into these different types of value, economic value, social value, shareholder value, physical value and so on.

Q3 - There are two public values that you have not mentioned and they're very important, peace and prosperity. You know peace and prosperity are the two values that, around the globe, are valued more than any economic attainment. So peace, without prosperity cannot be, and similarly, prosperity without peace. They need each other.

The values work that we do draws upon the literature in human value categorisations. The ultimate expression is the thirtysix level characterisation of Milton Rokeach and that does actually have peace and prosperity, they are a world of peace and a world of beauty. We use the categories that we use for brevity. But I think yes you're right, we need to take a wider societal and contextual view of this, and we will certainly be looking at using the Rokeach thirty six as we proceed. In that thirty six values characterisation eighteen are what we call instrumental values, which are ways of achieving the other eighteen values, which are what we might call terminal values, and that's things like the world of peace, which are desirable end states.

Q4 - In terms of your model, it seems like it worked very well in the state of consensus, I'm wondering how it would work in cases where it's a very divisive issue, where values are complex and in someone's polarised society. So how do you account for situations where what is valuable to someone may be damaging to another?

We have a long track-record, and recent public value management work with the nuclear industry and of course there is significant divisiveness within that context. What we do is we look at the community level and for example, it would be that if you surveyed somebody somewhere like say West Cumbria, in which there is a significant level of support, one would get different answers than if one surveyed Kensington for example, just being facetious. So yes, absolutely, you've got to control it for the context within which you define your public. In our work we very much focus on looking at the context and looking at the environment At the moment, with the work that we do in terms of value profiling of an organisational policy, it's not sensitive to the value categories or the value priorities of an individual. All we can say at the moment in our approach is that some projects relate to different values, and in terms of value priorities of course, that's a different set of questions.

Q5 - I just have three very quick comments that may or may not be relevant to what you said. I mean the first strategy was … I think you referred to the sense of economic failure, but I just wondered

whether do you position public in some sense as being an alternative to or a response to the issues that were seen to have led to the financial crisis in 2008? In other words is public value in some sense an alternative to financial value or financial capital? Could it be seen in those terms is one question. My second question was about the intergenerational issues. So one that's coming into question is about how we deal with assets and infrastructure and also the environment and climate change is about passing on costs to generations which are not priced in. I just wondered whether is there a dimension to public value which we can get a more considered calculation of the costs that we pass on to younger generations in terms of the impact of ecological, environmental interventions on the world? And then the very final question, which is not connected to that, is about deliberative democracy. You mentioned the issue of the Climate Change Assembly. I just wondered, within the context of public value, do you also see a potential role for new processes to try to connect policy with the public, so citizens' juries, deliberative forums and ways of thinking about how to get away from traditional, bureaucratic, political ways in which policy tends to be developed, both nationally and in local communities.

My colleague (Dr Stephen Haraldsen) has launched a forum involving debates between technical and lay audiences and participants relating to UK small and advanced nuclear reactor developments. That type of forum is valued, it does have a significant value, people like that relationship. One of the things about the statements that we used to unpack personal values in society is that the approach is very powerful and it's been used for the past forty odd years. The potential for this is to give citizens more say in the decision of Government, and that openness it's a key indicator of the possession of a certain type of value category. So yes this is valued, relationships, consultation, deliberation, they can be of value. Moving on to the other questions, we don't say that public value replaces financial value or prosperity, and I think that was key, that was a key point. Certainly you cannot measure public value without financials, things cost public money or have to be based on a viable and profitable business. We don't seem to get a connection in our work between public value and financial value, not yet. I think it will come to that. So we don't say public value replaces all of this, it's an adjunct to it. Certainly though, in a time of a fiscal crisis, Government and citizens and public sector managers are looking for greater value from limited expenditure. And I think it is easy to actually spend money which doesn't have much public value, in other words to be perhaps efficient and have not have public value, but it can also be inefficient to have public value or vice versa. So the relationship between spend and value I think is not clear, and I think we need to think about and consider that.

Q6 - Thinking public value, would you give the ownership of public value to the individual or would you put the onus on Government or institutes? It's an interesting concept, I think, but how to move forward?

In terms of public value, the public own public funding and what the public does and we all own this, we're all citizens, we're all members of the public. One of the criteria we use for the people that we survey in terms of public value profiling, we used the phrase 'reasonable informed citizens' and we're all part of it, we're all citizens. So the public sector doesn't own public value, it's perceived by the public. One of the things we've noticed with our research is the significant level of perceived public value created by things that are not often set up with that achieving this in mind.

Values are a very positive thing, inherently, and we found that organisations don't realise the value they create. Moreover, it's become clear as we move into the next stage of our research, if we look at our model at different levels, the relationship between organisations at different levels is key to the achievement of wider public value. So organisations achieve public value, and it's quite straightforward for many organisations that we work with to actually say, well how can we frame what we do in a way that highlights public value, but also how can we work with what we're doing and achieve public value to give us an appreciation of what public value actually is.

There's too much emphasis placed on money, but money is important, prosperity is really, really important.

Q7 - I just wanted to ask you a quick question about the institutional application of the notion of public value, and to what extent you think there's utility in using conceptions of public value to achieve focused policy objectives. Because I'm sorry if I'm jumping the gun into discussion of case studies, but for example New Zealand, where they are launching wellbeing budgets which are focused on the very specific social issues of mental health services, child poverty and tackling family violence, do you think that's such a broad conception of what value constitutes has a direct application to tackle social challenges of that nature?

You could look at policies in a number of levels of analysis, so you could have a view on national policy, you could ask what do you think what is the value of this national policy? Then one could ask service users or people in communities at local levels a more focused question about the same topic. If people would respond and recognise and connect with these policies differentially at different levels, I think the levels of analysis is key to a wider appreciation of public value.

Q8 - Just following up on that, when I think about the part of the world of Cumbria, the post-industrial Cumbria, I think on most measures, if you looked at the situation today with what it was fifty years ago, prosperity is much greater, living standards are higher, public services are probably a lot better. Yet there is something about a sense of a problem of community morale, and I would suspect if you looked and were able to compare the analyses, how happy were people between then and now? It might not be as good as one might think. And I think that conventional policies doesn't take into account, when you're looking at an area like the coastal strip of Cumbria, first of all employment rates might be high and unemployment, registered unemployment very low, but there are a lot of pockets of deprivation, a lot of mental health issues, a lot of physical health issues, families are worried that half the children leave the area for educational opportunities and never come back. So the extended family which traditionally was very important to people's life satisfaction is disrupted permanently as the successful move to the more successful parts of the country. And these are things that when we look at public policies, they don't seem to measure the value of how you address these problems.

There are two elements to the work that we are doing. The first element is really to do with value, public value is in the public domain. The fit, perceived fit between some policy, project, whatever, a programme or organisation with human values. The other element is as you can see from a very quick presentation, a very rapid overview, is of public values in an organisation. I think that's the ground in which there's work to be done in the organisations to recognise public value and to actually appreciate public value and how it's actually created and how it's optimised.

Patchy communities, patchy economics, patchy wellbeing, patchy health, these are I think huge issues in areas like West Cumbria. In that area in particular, there is an issue of a polarised economy and job market – the haves and have nots in terms of the nuclear related jobs. Some are connected with the local economy and others less connected with the local economy. Schools have a high proportion of Pupil Premium pupils. They live different lives and that isn't to say they aren't happy and that they don't appreciate value, but there is such a great potential for organisations, like the Sellafields of this world, for that work to be appreciated, that they actually put value into a community. The thing about public value, and public value approach is that it's about the wider impact on the public sphere of something. You don't have to be a customer or a supplier to work in it, it's what does that thing do to your community to where you live.

Q9 - Following up on one point, one of the things that I believe quite strongly is that people are in jobs but there is a declining sense of what I would call the dignity of work. I don't know whether that's a rather old fashioned idea. I think that coal miners and steel workers felt that they contributed something. This is of course a very male thing, that they were doing something of real value, it was tough, it was difficult but they have an enormous amount of self-respect for doing it. Now in any of your frameworks do you look at this question of the dignity of work?

Not yet, but I think it is an important element of public values in an organisation, and I think it's something we should look at.

Q10 - I just wondered what you thought about public value and the UK Governments' approach which has been tweaked recently? Suggesting it's moving very, very slightly in that direction, but not really with any single definition so far. It's the principles based code but I just wondered if there's a way round with value and corporate governance?

There's an understanding, I think that this is, I wouldn't say straightforward, that would be trite, but that this is very achievable. Of course, I think at a corporate level often organisations can feel detached from the public. There is an educational jump there, to forge that connection, that relationship between what I do tomorrow and the impact on the public sphere, which is a key thing. It's a public value within that organisation which are the route to public value externally in the public sphere, through public values in organisations.

Q11 - What do you think it means for what we understand with regard to notions of growth, economic growth in a modern democracy, in a modern capitalist economy? If you look at a recent high profile referendum, notions of economic growth haven't been the most valued concept amongst people in societies. Also the US CBI equivalent issuing a new statement on the purpose of the corporation, which replace the Milton Friedman teachings really about shareholder value as the be all and end all of the purpose of the firm. Everything you just pointed out to us and sketched out to us just feels very much like a new way of interpreting and implementing policy, it seems to have real significance in relation to how we measure economic growth.

It is a way of looking at things. The difficulty with public value research is that you're asking people about, and you can make some assumptions about, certain things if you feel it more feeds into that consistency with a particular value set that we actually use to evaluate something like say Sellafield or development firm or a local authority, policy, certain economic policies, that type of thing. But at the end of the day you're asking people about how they perceive it conforms with their values? There is a lot of public value out there, it's just they

don't recognise it and they don't ask people about it. Also I think it would frame what they do in a context of human values. It's easy to focus on jobs and money which are of course vital and essential, but you can go beyond that, and I think a public value perspective can go beyond purely economic - we create this amount of jobs and we create that amount of wealth – and look from a community standpoint, where things are fixed and people live their lives. Though public value has been around since the mid-1990s, the appreciation of it as a value is becoming more embedded if you like, certainly at the corporate level. So I look forward to continuing that collaboration with Sellafield and West Cumbria.

Q12 - Two comments, the first from the two previous questions, it reminds me a lot of Elkington's reflection on the triple bottom line and how it became a measuring tool rather than a reflection. The second comment that we should pursue, economies that may thrive whether or not they grow. I think there's also quite a lot of crossover with the geeky work I do around social investment and social value, which has made it maybe a bit more granular measurement sat below corporate value. Though some social return on investment analysis has got trapped into using big data set financial proxies.

Q13 - Clearly thinking about public value invites us to evaluate and measure success differently. Do you think, if you invite us also to reflect on skills, that we value organisations differently and the kinds of things we recruit for and the kind of leaders we seek? And we see our engagement, with council's keen to involve the public but with less staff geared up to have conversations about these consultations, it's really hard to get past those barriers?

That's essentially the difference between public value and the public values in an organisation. The set-up for deliberation leading to the realisation of public value in the wider world. We suggest that it's about values and it's about communication and it's about awareness. The opposition of the public, the general public to the nuclear industry, compared to the opinion in West Cumbria, relates largely to a perceived lack of fit between the industry and things of value to them. Fundamentally there are trust issues underneath it as well, for the industry itself. It is not actually trusted by great sections of the public, but also of course very few people have seen it and you can't tell where your energy comes from, with 20% of whatever comes through your electricity cables, being nuclear. You can't see the evidence and most of the messaging and communications about the industry have actually been by the media, the mass media, for whom news is about bad things. No paper reports 'today nothing happened at Sellafield and it worked fine', that's not news, but something goes wrong, it absolutely is. Also the types of risk associated with the industry, the so-called dread risks, are invisible, known to science, irreversible, potentially long-term … all of these things work against the industry. It's largely not its fault, rather it's about perception.

Q14 - How subjective are post-material values, how can you explore the thinking of doing a more proactive approach rather than post-questions looking back at an extant activity? Have you explored doing a more qualitative approach rather than relying heavily on closed questions?

All values are inherently subjective. In terms of the methodology, we do use open-ended interviews to frame the questionnaire and provide contextual information. We are also undertaking some more what I would call focus group type of settings for this, such as the Hybrid Forums I mentioned earlier. Inglehart summarised value categories broadly into two groups – material and post-material, and through we don't have the time or resource to go into depth into Inglehart's approach, which has existed since his first Paper 'The Silent Revolution' in the 1970s, we find the approach useful when one's talking to colleagues in industry to be able to give a very quick overview and focus on things like advancement, focus on actualisation, focus on society, focus on relationships and benefits for all, rather than focusing solely perhaps on basically jobs and wealth if you like, that type of thing, which are important of course, but beyond a certain point they start to lose traction.

The Public Value of Infrastructure

The Rt. Hon. the Lord Adonis

It's great to be with you and I listened to most of the last session, and I see everything has now been refracted through the eyes of the company in the North West, and that's great because it's good to have discussion that isn't entirely refracted through the eyes and vision of London, which normally have these discussions. The public value and infrastructure could mean absolutely everything, but I will give you my reflections on infrastructure, planning and social democracy really, exploring how infrastructure and the concept of building and maintaining infrastructure come together with the desire for a strong society and a fair society. How do they come together?

Just before this session, I was jotting it down six different bits of experience which have informed me to a very great extent. When I first left university, my first job was working for the greatest boss I've ever worked for actually, Sir Dennis Rooke, who was then the chairman of the British Gas Corporation which largely built the national gas transmission and distribution network. He was great at infrastructure planning. He also had complete contempt for people who had done arts degrees, which included me, even if it was sometimes necessary for writing speeches, he thought that the world was run and should be run by engineers. By the way, I think we need more of that in our society! We have too few engineers, particularly too few engineers in positions of influence and far too many people who do arts degrees. He also had a very, very strong view of an overriding national interest, which depended on everybody being connected to the National Gas Transmission Network and that was his life's work. He also had total utter contempt for ministers, he told me everything that had gone wrong with the British Gas Corporation was all the fault of politicians, he said. If it had been up to him, he said, all of the decisions relating to energy, infrastructure and planning of the United Kingdom, would be without any interference from that lot, as he waved in the general direction of the minister's office.

Reflecting on that, it's quite wrong to say that we can't deliver massive infrastructure for this country. It is a kind of myth, as we've delivered extraordinary things in infrastructure, such as the national gas transmissions as being one, the motorway systems being another. Another very much maligned, but in retrospect a very talented minister and planner at the time, was Ernest Marples.

The Victorians of course planned infrastructure extremely well.

Walter Marshall, the Chairman of the then Central Electricity Generating Board, who if you read the third volume of Charles Moore's biography of Margaret Thatcher, the account of her toing and froing over the [the privatisation of energy'] he held huge sway and scope and had such vision. The message is that it is definitely not the case that we haven't had these great public servants with great capacity in the past and we haven't some success because we clearly have.

The second experience I had was as a journalist on the Financial Times, covering telecommunications at large in the 1990s. The privatisation of BT and the creation of Oftel by the single most talented regulator I've met in my life, Sir Bryan Carsberg who created the concept of the utility regulation at arms' length from the Government.

The two reflections I had on that were that firstly, far, far, far too much faith was placed in the capacity of regulators taking the place of Government. Essentially what we thought was that wise regulators, working in statutes, could have undertaken a much more scientific and depolitised job than Government when it came to taking tough decisions. However, it became very clear to me is that regulators were OK when they were taking decisions that were popular and cutting people's prices, tariffs and charges, and they can be effective when they're working wholly with the grain of Government policy, in that case on liberalisation and privatisation. On the other hand, as soon as they did anything that requires conflict with political authorities, which would conflict with public opinion, such as putting up prices and taking tough decisions for new investments or the location of controversial infrastructure which is the case in a lot of energy sectors and so on, as soon as that happens, they're broken. It leads almost invariably to collapse under the strain.

Of course it was also created with a great faith in privatised facilities and the first of them was BT, the great shame then was it took months to get a phone line installed, which was rather a big factor in privatisation, but we've now come full circle into the fact that BT can't actually install in large parts of the country either quickly or at an affordable price. So the same given for privatising BT thirty years ago is now given as the same argument for nationalising BT.

My third experience was as schools minister under Tony Blair. And there, the extraordinary thing was we were introducing an infrastructure policy where there was absolutely none before, there had been no school building or infrastructure plan before, there'd been repairs and maintenance and urgent renewals but under that Government, the infrastructure programme for schools in the country increased tenfold, increased from £800 million to £8 billion a year. And it was transformational for the sector, much more than people realised. As I go round the country now, basically in terms of schools, country wide there are spaces lucky enough to get their share of this ten year period when there was a programme of national infrastructure, regional national infrastructure and those places that weren't. And London, part of the reason of the success in London schools and London education is that, in amongst a whole set of reasons, London was both front of the queue and commandeered about a third of the entire national infrastructure spend. It's no accident that it's London that has seen the transformation and improved performance in that period.

My fourth experience was as transport secretary, where when I came to office, there was no forward transport strategy for the country at all. None. In railways, which is my great passion, and I could talk similarly about the other parts of transport infrastructure, the forward plan for the country expired in precisely five years, this was 2009, and there was a five year plan and it expired in 2014. And when I asked my officials why we had no plan for electrifying railways, Britain has a smaller proportion of its mainline railways electrified than any country in Europe. Indeed Wales is the only nation in Europe besides Albania who still has not had a single mile of electrified railway. When I asked why that was the case, the answer I was given by my Permanent Secretary was they couldn't possibly have that included because you can't electrify in five years and we only had a five year plan, so it wasn't possible to consider longer term structural planning because the actual infrastructure for planning is something extended on five years.

My legacy in transport is probably the planning of HS2, which I basically did myself with two very brilliant officials, neither of whom had any background in high speed rail planning at all until we were going with it. Indeed, we discovered that there was not a single official in the transport department who had any knowledge whatsoever of international high speed rail. And there was no mechanisms in planning at all. And it was partly from my experience of that and a real race against time to get serious infrastructure plans in place before the 2010 election, as I had a hunch that Labour were not going to win that election and that the Government that came after wasn't going to be particularly sympathetic to the infrastructure planning because it was a Conservative Govt who wanted to spend a lot less money. It from my experience of that which enabled me to persuade George Osborne, and led to the creation of the National Infrastructure Commission which I then chaired. It and since published a twenty-five year national infrastructure plan. However, it has one big exception, which is quite significant, it has no proposals for the planning of housing infrastructure, which to my mind is the single biggest infrastructure challenge facing our country at the moment. Basically there's been no housing infrastructure plan in this country now since we stopped building social housing in the 1980s. And he told me that he didn't want to look at housing for two reasons, he said it's too politically sensitive in Southern England, planning new housing, and he said in any case we've got no money for it and I don't want people to have false illusions. That's one way of dealing with these problems!

And then my last perspective came travelling up and doing the country doing nearly 200 meetings on Brexit in locations large and small over the course of those two years. It's taken me to all parts of the country but predominantly I started off in the Midlands and the North, trying to get to grips with the Leave areas. And I was shocked, even with my experience, having been a schools minister and transport secretary, at how haphazard provision of infrastructure is and how isolated many communities are in terms of the actual linking up to national infrastructure. Most of these the communities are the more remote communities.

One striking fact linking infrastructure to these Brexit meetings is that if you take most of these more isolated and disadvantaged communities, particularly coastal communities, almost none of them had through railway services to London. Indeed you can chart places of those who Remain as against places who voted to Leave, almost direct correlation with regular through trains to London. It doesn't actually matter how far distant they are to London, you can be Newcastle, which is a long way distant from London, but you still do have a regular electrified three-hour train journeys to the capital. However, if you're a Hull, or Grimsby, or Whitby, or Scarborough, or go round the whole of the country, then you have much worse rail connections and very few through trains, then that is almost a litmus test of the fact that you're also going to be deprived in many other respects too.

So what do my reflections on all of this offer? The first is to dispel a myth, and it is untrue, that we cannot now deliver national infrastructure. High Speed 2 demonstrates that we can, despite all the politics, especially given that railways are in some ways the most difficult infrastructure possible to do because as somebody put it to me when I first planning HS2, everybody wants the station but

nobody wants the line.

Actually when the pressure exerts itself, because of the unitary state we have, sovereignty of Parliament and the ability of the Treasury to commandeer national resources, we can get things done very fast and you can ride roughshod very rapidly over objections. The whole of HS2 is being built at the moment by phenomenal exertion of state of power through Parliament, with three different Acts of Parliament being passed to make it possible, and the first phase will be completed in ten years with eight years from planning to the start of the construction, which is about the time it took the Chinese to do it. So the HS2 network will be competing with the time it's taken the Chinese to build their high speed rail network, and we had one or two more obstacles to overcome which delayed it. So we can build infrastructure successfully when the state chooses to do so, despite not having any systematic plan structure, and too much influence exerted by the whim and preferences of individual ministers and individuals Governments, particularly the Treasury, rather than it being exclusively prime ministerial.

That leads on to my second point, what would make it possible to counter that particular weakness would be a tier of really serious regional Government in this country. And if I had to put my finger on one constitutional reform, I would advance beyond almost any other at the moment that it would possible to do so, it would be to do to Britain what we did to Germany after 1945, when we created the Lender with the federal state. We did it as a counter to an excessively strong central Government, which of course had a particular connotation in 1940s Germany, but it has provided balance. Our analysis of what was wrong with the Government in Germany, and the need to plan much more effectively for the future, could and should have been written after the War and it still should apply to Britain today. The truth of the matter is that England has only one regional Government worth the name, and that's in London, indeed the United Kingdom only has one Government worth the name when it comes to infrastructure and that is the United Kingdom Government, because the Scottish and Welsh Governments have no real sustainable basis for planning infrastructure. And it's no accident that the part of the country which has by far the best infrastructure is London because it's the only part of the country that's able to plan infrastructure in collaboration with, and separately from taking sufficient command and resources from central Government in London. And as I look at the infrastructure transformation of London over the last twenty years, and it has been a transformation, it's been almost entirely led by one very brilliant Mayor of London, Ken Livingstone, with successive mayors and a whole succession of ministers who basically cajoled Government and the Treasury. What should happen to all of the rest of the regions of England is very simple, they should, as far as it is possible to do so politically, replicate the model of the mayor and assembly that there is in Greater London, which is the single greatest vehicle and engine for infrastructure planning and equity in London.

The third point to make is that we need to have a much more robust sense of what universal service is in infrastructure. As I look back at the great infrastructure, from the Victorians, Trollope and the postal service, the world's first really seriously universal business service, through to the post-war years of road and rail (when they weren't being closed) what they all had in common is a very, very strong, embedded sense of universal service across the country as a whole. They didn't engage in long elaborate debates with regulators and Government departments as we do now on what is the right balance between market provision and safe provision of services. What they did was they took for granted a universal service at a very high level, in terms of the postal service, in terms of the communication service, energy infrastructure, railway infrastructure, and so on. There was an acceptance that all parts of the country would be served, and if we take railways, there was an acceptance until the Beeching cuts that pretty well any town of more than 10,000 people would have a minimum level of railway service. The large part of the reason why we've had isolation since is because that mindset of universal service was ditched in the 1960s. And my own view is that the right thing to do is to go back to this very strong sense of universal service, rather than trying to make elaborate calculations with regulators which too often end up short-changing large parts of the country, particularly more remote and deprived parts of the country.

My final point is that of equity, of course universal service can't deal with this alone. Taking of universal services alone is to talk of planned inequity because of people's purchasing power so the universal service needs to go hand in hand with a strong welfare state. And at the heart of our strong welfare state over the last sixty to seventy years is a strong sense of entitlement to basic services provided through the market, which will be subsidised to a greater or lesser extent, which actually if you looked at it historically hasn't benefited health, dentistry and parts of welfare services like that. Two other areas, both of which were suffering enormously now from the fact that they don't come within the concept, the first is housing and the removal of the concept of social housing, which has been the biggest change in social and infrastructural policy in the last forty years, and secondly the concept of very serious de-subsidised transport outside London, which does have seriously subsidised transport because the Greater London Assembly and Mayor.

We should have a much greater sense of universal service, we should embrace most of those parts of infrastructure that the middle classes take for granted. We should increase levels of subsidy, we should have a [longer??] sense of equity, and that should include at its heart, housing costs and housing provision and transport. And there are two things that do more to hold communities together than housing and transport, so putting those at the heart of the policy I think would be a very, very big step forward for social democracy as well.

Discussion with Lord Adonis

Q1 - I was first struck by your comments about the parts of the UK which are out with connections poorly served by infrastructure. I was recently in Lincolnshire, absolutely amazed at how difficult it was to get around by car, train, and bus. It's the highest Brexit supporting part of the country. But the difficulty which the main political parties have come across is this issue of the extent to which there is public support for regionalisation and how you deal with the problem of whether there is a public appetite for a regionalisation of Government? Because it ends up people just talking about the regionalisation administration, which means that regional Government becoming merely an extension of central Government, which is the thing they didn't have in Germany.

Well that used to be the view and of course it came sort of after the failure of the referendum in the North East. And actually I don't think that's a defensible proposition now, because if you look at the problem with devolution now, the problem at the moment which is a real and urgent one is of the creation of regional authorities. So over the last ten years, city mayors and combined authorities have been created for South Yorkshire, Greater Manchester, the West Midlands, there is now one for the North of the Tyne, Merseyside, I've missed several, but most of the major city conurbations now have regional mayors, all of which were intended to be based on the London model, and these have all been freely voted for by their constituent local authorities. However, without exception, central Government has refused to give them significant powers. The one that has most power outside London is Greater Manchester, but the powers are trifling, no really significant devolution of spending authorities, miniscule tax raising powers. Some regulatory powers over buses and so on, but not much. And if you look at Greater Manchester at the moment, which is one that's most advanced, most of the infrastructure planning was done, and with infrastructure in London it is the Mayor that does most of it, but that's still mostly being done by central Government and not by the Mayor of Greater Manchester. Indeed most of the mayors at the moment are now taking on the role just being complainer in chief, complaining to central Government about why nothing is being done in their regions, but they have almost no power to affect them. So it makes some sense that because of the economic and political geography in England there are some parts of England which are hard to allocate to regions, particularly those that do not have a very big city at their hearts, because by and large big cities are natural leaders which historically had fewer tiers of Government anyway. While I accept that, if there was proper sustained programme of devolution to those mayoral authorities which have been established in the last ten years, then that would be a massive first step. And I think that with just the model of those would create a demand for the rest of the country for them too.

Q2 - I find your idea of essentially increasing devolution very, very appealing and very timely, it's been quite a while since I heard someone actually advocate it, so I'm very glad you have. My question builds on the comments you just made about how different regions then copy and extend of what's already been granted. Britain historically has gone for a very different approach to federalism than other countries, where they had some sort of constitutional convention and then completely reorganised their policies along federal lines, Germany being the greatest example of all this. But Britain has done much more of a piecemeal, gradual, let's see how it works type approach. Which one would you favour? Do you think Britain needs to sit down and just completely re-order itself internally or do you think we can continue along an asymmetric, we'll see what we need type approach to federalism?

I used to think, because I'm an Oxford empiricist and very cautious and conservative in my approach, how you think about change, even bold change, it has to be because going back to Henry VIII is the only way to get anything to happen in this country. I used to think that it was pie in the sky to think that we could have some kind of constitutional convention type redesign from scratch approach to constitutional reform. And the experience generally, and I'm immersed in Germany
Where post-war the constitution was drafted learning from what they saw as the weaknesses of Germany, the weaknesses of the British Government too, and designed a whole plan, making some allowance for cultural and geographical and other factors. I thought that was pie in the sky to think that you could do that here, because we haven't had a revolution, we haven't had a dictatorship, we haven't had an occupation, so we haven't been able to do it. However, I've changed my mind in parts, I changed my mind in parts only yesterday by the experience of devolution in Scotland, Wales and Northern Ireland, where with differing factors in each case, and London of course actually, with differing factors in each case, but nonetheless

to a significant extent, the imposition of a plan generated in the case of Scotland and Northern Ireland essentially by constitutional conventions, and in London essentially the recreation of a tier of London Government, by a massive act of will from the centre and writing out the plan. I come in stages to think that it could be done, indeed the only case where we've actually done regional governance in this country have been because there has been a constitutional convention or a plan from the centre and often indeed the two coming together. However, the experience of Brexit and what's happened in the last five years has moved my thinking not only that it could be done but it must be done. Because a large part of Brexit crisis that we're going through is essentially a collapse in the legitimacy and effectiveness of Government in England, that's essentially what's happening. Outside London, Government in England no longer has sufficient legitimacy because it's not delivering sufficiently on goals of governance to maintain a basically equitable, prosperous, economically vibrant one nation, simply not doing it. So that is the lesson. There's one big lesson which comes after Brexit and it is that. So my view now is that we do need to move towards some kind of constitutional convention, but the shock of Brexit, whether it happens or doesn't happen actually, gives us an opportunity and indeed a necessity to do it,. We should be thinking about how this should be structured, we should be learning like mad from the experience of our own successful devolutions, Scotland, Wales, London, but also as you say experience elsewhere, including the Federal Republic of Germany, which is the single most successful exercise in state creation in human history, in my judgement. We should be doing all those things, and we need to do it urgently.

Q3 - This discussion of Brexit and regional devolution reminds me that of course the strategist who ran the campaign against regional devolution to the North East in 2004 was none other than Dominic Cummings. So if you want yet another reason to dislike Dominic Cummings, there is the role that he played in destroying the case for the North East Assembly. But in all seriousness, I mean he did it of course by raising very potent arguments about duplication between more politicians, wasteful layers of bureaucracy, on layers of Government which are not accountable. Arguments that I agree with, but arguments that we have to be able to counter if you're going to end up with legitimacy in the marketing of a regional. But my question is different, it's about the shift from investing in people to investing in place. And it's just an insight really which, thinking policy circles thirty years ago, the fashion was to deal with inequality by basically investing in human capabilities with individuals by redistribution, education and skills. It seems to me that that was for all sorts of reasons a very important set of arguments. But what we've learnt in the intervening period, and particularly actually in the period since the Brexit referendum, is that if you don't invest in place, you're missing an important theme, because it's not just about what individuals apply in terms of skills and human capital, it's also about the place where they live and the place where they work. So I'll just invite some thoughts on this question of do we need to think in policy terms more expansively not just about the destiny of the individual and making them capital, but in the places where people live and work, which I think connects back to Rick's presentation around a richer sense of public value.

Well that's a very important insight and I completely agree with you. It's got to be people and place together. And if you look at the most successful things we've done as a country in the last twenty years in terms of social infrastructure, which really does boost people's life chances and capabilities, it is by investing in people and places together. And the two biggest examples of that, which I would draw up, which were very consciously investing in people and places together, were London where you and I worked together in Number 10, on what was a London schools programme, and we were very consciously seeking to invest in skills and education, but to do so specifically in London because of this overriding sense at the time, it's ironic now looking back at it, London was the basket case of England. What we actually needed to have done was to have treated all the rest of the country in a similar way. However, part of the reason why central Government could reform London's schools so successfully, and why it was so amenable to investing in those schools, it was very important to understand this, because central Government is located in London and because the policy makers were so largely sending their own children to those schools.

I was minister for London schools, micro managing London schools literally, I mean literally I had a map on the wall in my office of all 432 state secondary schools in London, but of course it was literally around the corner from here, and I could go round and visit a lot of them, indeed quite a number of them were within walking distance from here, and you can do that from London if you're central Government in London, but it comes back to this point about regional Government and getting really serious devolution, you needed an equivalent authority in Manchester, in Leeds, in Bradford able to do it, and that was and is never going to be central Government. And indeed it became painfully clear to me when I was transport secretary that in order to plan the Northern parts of HS2 I had to move for weeks at a time to Manchester. Now actually I thought it was a jolly good thing to do. The view I formed from that, if I were to continue being secretary of state for transport after 2010, was of moving my office to the North of England

completely, because I was so struck by the fact that when you spend weeks as a time in these places, as I was doing when I was planning HS2, it totally transforms your perspective. For example, if I'd remained in the job, I would certainly have started building HS2 from the North, not the South, which is what should have happened, it would have transformed the whole argument for HS2. Why is it being built from the South? Answers, because all the policy makers are in the South, and they are, very, very aligned with all the Southern problems which HS2 is addressing, but nothing like this aligning to the Northern problems. So the two should go hand in hand.

Now when it comes to the North East, the big problem with the North East and the North East Assembly is that we designed a political structure before we worked out what it was going to do. And the reason why London is so successful is that when we went out there, because we did create a bureaucracy, we created an assembly, it wasn't a big assembly, it was too big in the North East. The big, big argument for a Mayor of London which was being made, was not about creating a Greater London Assembly and the mayor, it was creating somebody whose job was, and was going to give them the money to do it, to sort out London transport. Twenty years ago London transport was a basket case, and what's needed in these other regions now is exactly the same approach, it's not starting with the political infrastructure, it's starting with the social and economic missions needed, which is two things, in all of these regions more and better jobs and what the strategy is for jobs, and infrastructure and getting infrastructure as good as London.

The second, which goes to the heart of one of the better stories in the North West, is universities. Part of the argument why we deregulated university finance and introduce fees, which was not properly understood at the time, was our awareness that the most successful social institutions in most of the country outside London are universities, they were then and they are now. And empowering them to become stronger, we thought then, would be a very, very big part of building up the major towns and cities outside London. Now returning to Brexit, I said to you that there was one group, which is where we see trains to London, but there is another factor highly correlated with supporting remain or leave, and it is whether or not you have a university. Everywhere that has universities voted Remain. All of the places that voted Leave do not have universities. That is an almost invariable rule. What is the answer to that? We need more universities, we need more higher education, we need to invest in place much more significantly, and all of those reforms which we take great pride in over the last fifteen years of higher education, they need to be at the beginning, not the end of the process.

Q4 - How many more towns are going to have a direct rail link to London as a result of HS2? And are there going to be any improvements in connections with the regions as a result of HS2?

HS2 isn't intended to do that, and we can't expect any reform to deliver objectives for which it is not intended to address. Since HS2 is not intended to connect by rail any of those that aren't connected at the moment, obviously it doesn't connect any more towns. What we do need though, because one of the great things I learnt from Tony Blair is that the art of doing successful politics and public policy is always to ask the question, can you substitute or with and, and often you can, is we need both HS2 and a programme for reconnecting places which are isolated from the rail network. Indeed if you read my speech to the IPPR three months ago called 'Reversing Beeching', I set out a whole plan to how it could be done, and in particular how at affordable cost you could connect the forty towns which are of more than 20,000 people that do not at the moment have a rail connection, but it's all there. And indeed I was very pleasantly surprised to see that Boris Johnson announced a policy last Friday called Reversing Reaching, which is word for word my policy!

The only difference is, because of course nothing will come of nothing, I had a £2.5 billion dowry to get it going and I got most of that from cancelling one really ludicrous infrastructure proposal which has been done very short-term and for distorted political reasons, which is a tunnel under Stonehenge, which alone would cost £2.2 billion, whereas theirs is only £500 million because they won't cut the Stonehenge tunnel and put that into it, and the reason they won't put a Stonehenge tunnel into it is that it abuts two very marginal Conservative seats, and rather like the Humber Bridge, which as somebody put it to me, is the only piece of national infrastructure that hasn't actually paid for itself over the last thirty years, it's been done for entirely political reasons. So I accept the premise of your question, which was intended to be what are we doing about connecting places that don't have adequate rail connections at the moment, but it is possible for us as a country, and a developed country in 2020 with a strong central Government, it is possible both to reconnect isolated communities to the rail network and build a high speed line. And by the way, a high speed line which will match those which have been built in the last fifty years by Japan, China, South Korea, Belgium, Holland, Italy, France, Germany, Taiwan, and even the United States, which is terrible at these things, it built its first high speed line between LA and San Francisco, so we should just get on with it.

Public Value Management in the European Space Agency

Dr Gianluigi Baldesi, European Space Agency

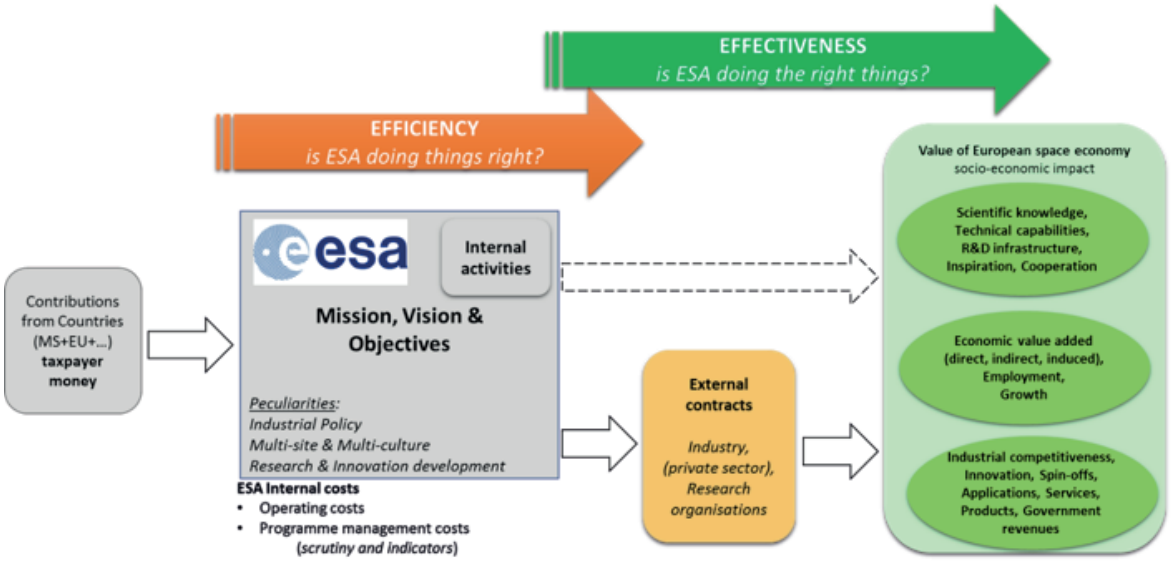
A picture of London aurora taken by ESA astronaut Tim Peake during his six-month Principia on the International Space Station – courtesy of ESA

At the European Space Agency's major conference with its member states, Space19+, where we decide the budget for the next three years, the main message in general is 'space as an infrastructure'. This is a fascinating time to consider then what we should be doing now to design space as an infrastructure for delivery in ten to fifteen years' time. It invites us to have discussions connecting concept and service, and poses the big question – what will people want in a decade?

When you think about space, we have quite a variety of activities:

- Scientific research and exploration
- Manned space flight and the International Space Station
- Rockets
- Applications
- Observation
- Communication
- Industry and technology
- Other…

What do I mean by other? I would say the visibility of the European Space Agency in terms of what we are working on and our message to the citizens of Europe. How can we convey what we do, and where we want to go? Twenty years ago we were always facing the problem of efficiency. Money raised via taxation in member states came to the Agency and we did our job. The question was are we doing things right? Are we efficiently spending that tax money from our member states? Is enough of the money coming in from the member states making it out to space activities? However, ten to fifteen years ago we moved away from the concept of efficiency to that of effectiveness, where we became more concerned with the impact of our activities upon the member states and their citizens. In short, we moved to asking the question 'are we doing the right things? This meant looking into the socio-economic benefit of our projects, which we conduct for all our work when we make the case for a new project - how much money will be invested, and from that and how much additional public money will be generated in terms of economic impact, employment, intellectual property, commercial developments, and so on. All this activity for us, we use the jargon 'the space economy'. The challenge is also to assess our wider role, those things such as exploration, culture, knowledge, which are a tangible asset. So the question we arrived at was, we have all these ways of measuring our economic impact, can we measure our wider impact on the



citizens of Europe in a sound, transparent way? After all, it is a lot of money we spend!

In that context, from our wide range of activities, learning from what used to work and what is demanded of us now, and looking to the space infrastructure of the future, the Agency was interested in the work in public value management being undertaken at the University of Central Lancashire. So in 2018, in Carlisle in the North West of England, the Agency signed a partnership agreement with the University of Central Lancashire based on undertaking research into public value. This is one such agreement that is part of the wider programme of establishing ESA_LAB initiatives at Universities as a way of exchanging knowledge between the agency, industry and academia.

So what we have done? What is the impact of the European Space Agency on the public?

- Narrative - Of course the first thing that we are addressing was to contribute to our narrative for the funding, but also, and this was also the point that it was before, the human centric approach for the development of policy.
- Legitimacy - The other important point for us is to secure legitimacy. So if you go beyond the return of investment concept and see what is the difference as we compare the new space company, and the old inspirational investments in space, and other actors working in this sector. Doing so we can ask and assess 'are we are special'? And if we are how we can convey our message.?
- Dialogue - Finally, how do we engage with the public. There is an increased interest in what we are doing from the public about the activity of ESA, but also there is a growing interest in space activity in general with new developments in commercial space and so on.

The big challenge for us was to move from the theory of public value to something more concrete. So how we do this? The method is in three stages:

Empirical work

This comprised qualitative and quantitative data collection. The qualitative work began with off the record 'conversations in context' which helped the researchers from UCLan (Dr Rick Wylie and Dr Stephen Haraldsen) understand what our challenge, what is our business, and our work, what mistakes that we are working on and so on. It was quite a journey to see how colleagues react from the first discussion and a surprise, to consider for us as an organisation a different basis, so there is really a learning phase from and for us. This was followed by structured and recorded interviews to gather on the record qualitative data. This informed and adds context to the main research instrument, the qualitative questionnaire. In 2019 we undertook a survey containing a number of value propositions for people to answer, face-to-face or on-line, administered to a group of 'reasonable, informed citizens' who had some awareness of the sector and agency at the Paris International Air show and the New Space Economy Forum in Rome.

Analyse, interpret and compare

Using this approach, we have assessed public value using an ontology of values based upon leading theory of human values. We stress that this is not a

public opinion poll. Rather, it gives an appreciation of the contribution ESA is perceived make to the common good among respondents who undertook a questionnaire survey. These findings reveal a very significant level of perceived contribution of ESA to the public sphere within the scope of the totality of human value and motivational categories. These values are important in that underpin a contemporary worldview associated with security and affluence. It is stressed that this is not an assessment of ESA's performance, nor is it an opinion poll. Rather, this project gives appreciation of the Public Value of ESA among reasonable, informed citizens in respect of its contribution by Human Value categories.

Ultimately, 303 questionnaires were used as input to the study from Paris International Air show at Le Bourget in August. All respondents completed a 19-item value profile questionnaire which was available in English and the native language of the location.

Results reveals overall that, from the data used, ESA has a positive Public Value profile. ESA is perceived equally positively among both cohorts notwithstanding their different profiles, especially among the generally highly rated Self-direction value category. The results also reveal greater perceived value in self-focused Human Values than in socially-focused Human Values. This is a significant finding, especially because among the highest ranked value categories are Universalism and Self-transcendence form important parts of contemporary worldviews across European society.

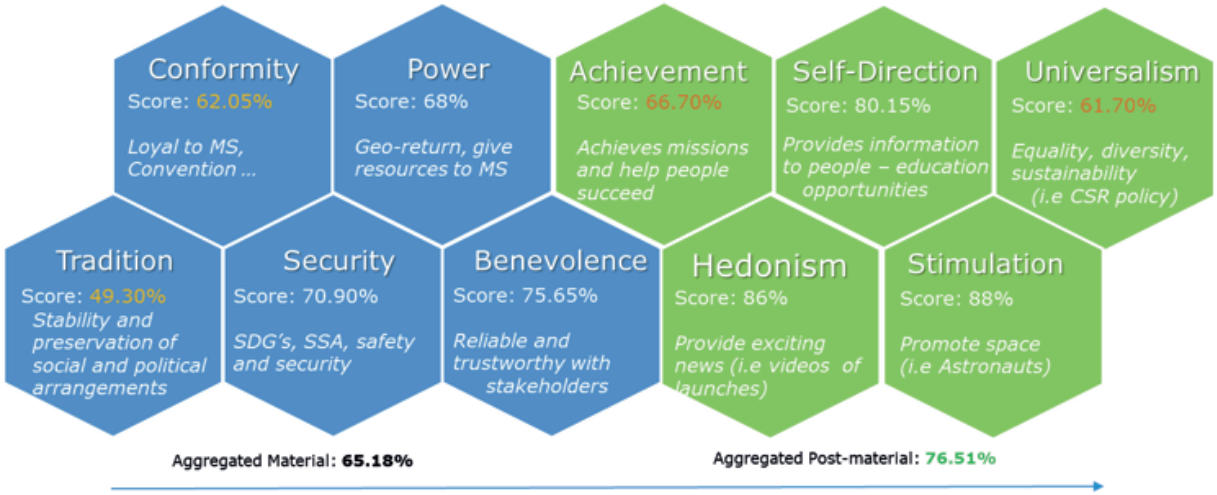


Figure 1 - Results of the profile of the public value of ESA conducted at Paris International Air Show at Le Bourget in 2019

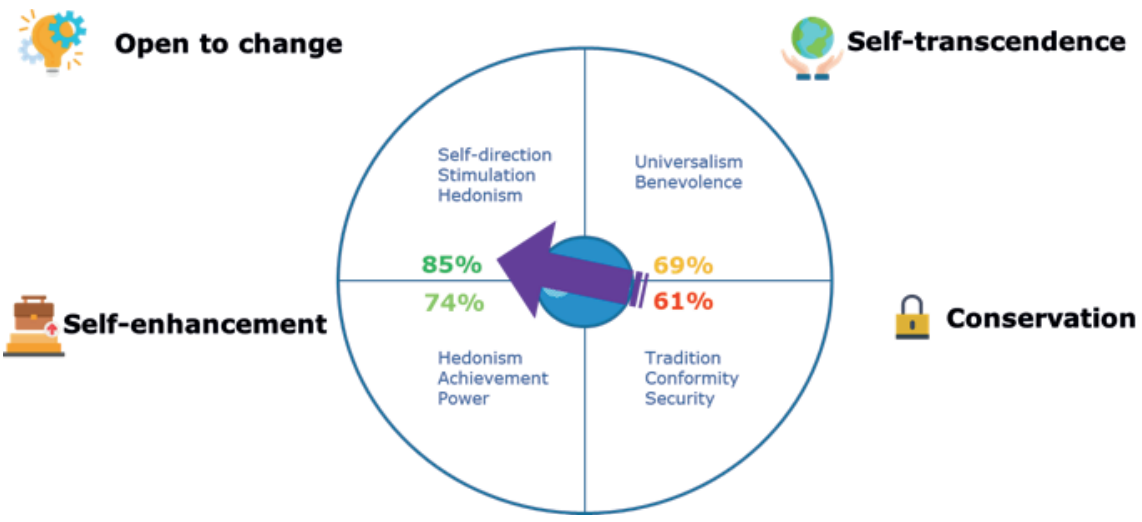


Figure 2 – Interpretation of the results based on four categorisation of human values

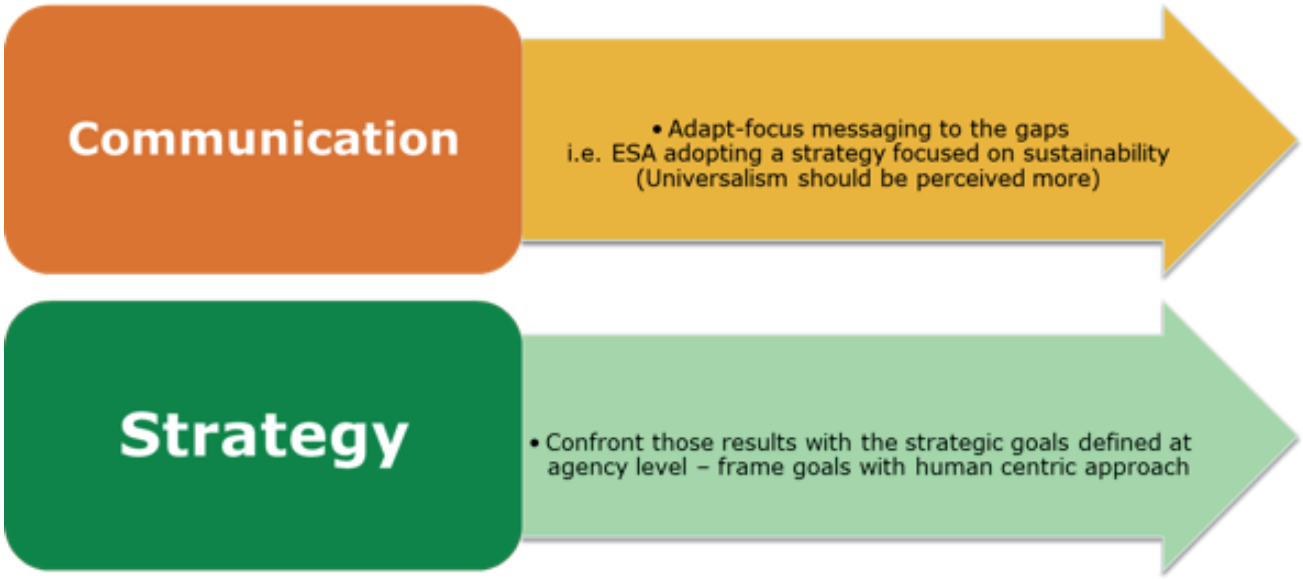


Figure 3 – Management actions arising from our public value profile

Furthermore, at the European Space Agency we work every day to provide innovative solutions for the benefits of the society. We take risks that no other organisation could take given the highly uncertain direct return on investment that normal companies would need to provide to in order to be financed. Thus it is not a surprise that the agency achieved higher in values reflecting openness to change.

Design and implement change

Following the results of the research we are focussing on two areas, communications and strategy. Firstly, our communication. Taking this research into account what we are currently doing is assessing these around a profile which is basically the one that is perceived by people that are knowledgeable about the agency. We did not survey the person on the street because if they don't know what the agency does, it's a bit more complicated. We needed to keep undertaking analysis to look at what we think our public value is and what public value we should create, versus what people perceive it as. This involves comparing to other international data, and reflections internally in the agency with our partners in this research at UCLan. From this we can design our communications to address that perception gap. Secondly, there is then a larger point, which involves taking into account this reflection and understanding how we can move our strategic goals to incorporate a more human-centric approach into the agency. From that communications and strategic impact, we can then move to position the public value of the agency with our member states governments and agencies and apply human values through their policy contexts.

Harnessing Nuclear Science to Benefit Society: An NNL Perspective on Delivering Public Value

Dr Paul Howarth, Chief Executive, National Nuclear Laboratory

This paper describes the journey that we at the National Nuclear Laboratory have been and try and explain where we are up to as an organisation, working in the nuclear sector, and addressing how we see the important topic of public value. We haven't got all the answers as far as this journey is concerned, but we have learned valuable lessons on the journey so far.

What is the NNL and our context?

Before going further, it's probably worth a bit of an introduction as to who we are as an organisation. We are owned by the UK Government and we are responsible for delivering to the UK nuclear industry and providing technical advice to Government with regards to policy. We operate as a commercial business, but also our role is to provide the UK's national strategic technical capability that is needed for a whole range of programmes going forward.

Some of the headline statistics, as far as the organisation is concerned, are:

- UK's National Nuclear Laboratory for fission
- Annual revenue - £100m+
- Around 1000 employees including over 450 scientists
- Earnings to Reinvest (profit) – typically £5-10m
- Over 10,000 person years of nuclear industry experience across the whole fuel lifecycle
- 6 locations across the UK including high active laboratories
- Principal customers include: Sellafield Ltd, EDF Energy, Ministry of Defence, BEIS, Westinghouse, Nuclear Decommissioning Authority (NDA), US Department of Energy

While the actual size of the technical capability is not all that large, it is extremely specialised in its subject matter expertise and technical capability. That is what the UK needs to retain, it is the really important nugget that sits at the heart of the UK nuclear industry. We operate across several sites in the UK and we operate some very specialised nuclear facilities, around about £1.5 billion worth of unique nuclear infrastructure and real estate that is needed to support the industry going forwards. We have about 10,000 person years' experience in the nuclear industry.

Where do we sit? What is quite interesting is in technology readiness level. This concept came out of NASA, describing where technology is up to in the space industry, and we use that same terminology in nuclear now. Universities generally sit around low technology readiness levels and then you get industry that is ready to deploy. We sit in the middle as a public sector research establishment that effectively joins the two ends up. The Chief Scientific Advisor to the UK Government, Sir Patrick Vallance, issued a report in late 2019 which recognised the importance of these organisations to drive economic growth. 'The Science Review' outlined what the Govt is looking for in terms of mission driven public sector research organisations and the role they play in the economy, some of which will be addressed in the course of this paper.

This important space in the middle is key and Lord Adonis (elsewhere in this collection) mentions Germany as a model in terms of constitutional reform. For science and technology we can look to Germany as well; the Germans have the Fraunhofer Society and it's 72 research institutes that sit in this space and really help German industry to excel in many different areas. It is one of the things that in the UK we have lost sight of this and we need to get this back on track.

Why is innovation imperative in nuclear? There are a number of things that we need to deliver, such as new reactors, such as Hinkley Point C which is being built, and upcoming new small and advanced reactor designs. We need to drive down the cost of both new nuclear, for large plants and smaller sites, and the legacy management programme that the Nuclear Decommissioning Authority looks after. We also need to support the Ministry of Defence and their programmes. So there's some really big challenges that one way or another work back to the taxpayer and to Government and to policy and the role of science, technology, engineering and innovation to deliver those activities.

One big element of our work is supporting Sellafield, which is a very big, very complex estate, which is a pressing technical, scientific, radiological, environmental and financial challenge to decommission. What we need to look at is how do you bring in technology from other industry sectors to solve the challenges and problems that Sellafield may have. Equally, this could apply the other way to other industry sectors. The issue generally is then how do we get this flow of technology, innovation, know-how between industry sectors working better?

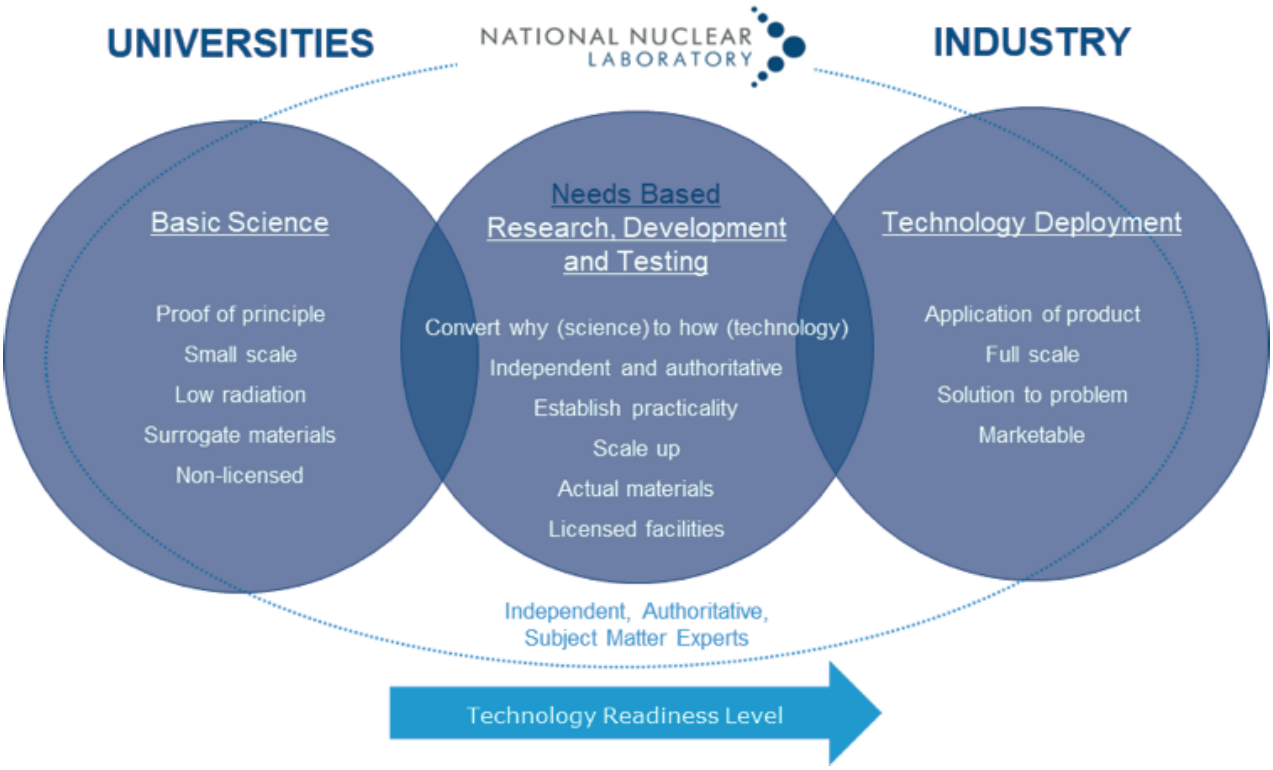


Figure 1 – Technology Readiness Level and the role of NNL

Measuring our value

We have been looking at how we measure our value. It is very important to us where? we bring value to the owners of the business, which happens to be the UK Government, but it could be private sector shareholders for other businesses associated with nuclear. What value do we realise to our customers? What value do we contribute to the regional community around our sites, especially around West Cumbria where the nuclear industry is a dominant force in economic and other spheres of life? What value do we bring to the nation, whether that is associated with delivery of its energy policy, defence policy, industrial policy and so on?

To address the question of our value, we have been doing quite a bit of thinking, supported by UCLan, to helping us understand this. I have also drawn on some of my experience for working with Battelle in the United States, where they equally wrestled with this, and the US Department of Energy has recognised that in certain regions you get these entities of national laboratories that actually become a catalyst for technology based economic development in the region. How do you utilise the fact you have a really high-tech organisation sitting, certainly in the US, in what might be an isolated geographical community? How can that entity help diversity and revitalise the local economy?

One of our sister laboratories, the Lawrence Berkeley National Laboratory in the United States, has achieved a market capitalisation of businesses spun out by the scientists and the engineers of $9 billion US. That is a big way in which you utilise these entities and the value that they bring. We are keen to see how we effectively unlock the value that sits within entities such as the National Nuclear Laboratory. The value that we bring goes right across the UK's nuclear programmes. How do we measure this value, and given the diverse impacts, what that value actually is?

A good example of that is our research, which helps with the continued safe operation of reactors, helps to keep the lights on. The impact that has on many people in many ways has significant value beyond that which is captured in economic calculations. While our research may be a small part of it, if we didn't do it you cannot keep the lights on, or operate those reactors safely, how do you measure that? Another example, where the short-term monetary value is straightforward to quantify, is the support we give to legacy waste management and decommissioning programme it is a hundred year programme, costing £100 billion to deliver, what we aim to do is to find science and technology and innovation that allows us to deliver that programme cheaper, quicker, safer, how do we do that? There is the amount of money we save with novel solutions, but what's the full value associated with that work

being safer and faster, not just from a monetary point of view but to society as a whole?

There are also a whole range of programmes that in one way or another such as nuclear where we only play a small part of it, from the research technology angle, but what does it mean to the broader programme as a whole? Indeed for Cumbria, as mentioned earlier, it is geographically isolated, how do we look at the value that we bring to Cumbria? How does Cumbria help the UK to deliver its energy policy objectives? How do we help Cumbria as far as the defence objectives are concerned, with the capability down at Barrow and what does this mean for the socio-economics of Cumbria? It could be an interesting situation if you rapidly accelerate the decommissioning of Sellafield, then that would be good, because you'd get the cost of that programme down, what does that do to the socio-economic community that effectively lives off that programme? You have got to do it in a managed way. And that's where we see as a National Laboratory we can help to smooth and to move the economy of Cumbria into a more diversified technology-based approach.

Some of the work that we have done here, we have worked with a number of entities where we reach out to the community, we look at start-up funding, to look at organisations that may have ideas in the community, they might not be associated with nuclear, they might be associated with something else, but what can we do to help broaden and diversify the thoughts and the ideas that people might have as far as their businesses may be concerned in the future? And some of the small to medium enterprises here that are listed that might be associated with nuclear but could diversify out. For example, one organisation that we've worked with was used to dredging scallops in the Solway and they had technology that could be used to support decommissioning of the Sellafield site, and we helped to make that connection. And you take two very separate industries, you would not necessarily think what the link is between them, but you could help to join them up.

This just goes to show, a small programme utilising an organisation like ourselves, we invested … it's written there in the bottom left hand corner, and then what we were able to yield from that to support wider economic benefit to Cumbria. It's just a small amount of funding, it's not going to change things, but it gives you an idea potentially as to what we could do. This economic value is excellent, but it is not the end of the story. It is the point of departure where we start to measure the wider public value, well beyond pounds and pence, and well beyond what we do to support the UK's nuclear programmes

Are we delivering public value? When I sit down with the minister and he says to me, 'OK Paul, National Nuclear Laboratory, what have you delivered over this past year?' I must run the organisation effectively as a commercial entity, even though it's owned by the Government. I have to make sure that I run a positive profit and loss, just as much as if I was reporting to private sector shareholders. I have to tell the Minister that we have grown as an organisation over the past twelve months, with solid growth in revenue of 10 or 20%. However, beyond the internal financial performance, I can illustrate that science and technology can actually make massive savings to the delivery of the nuclear programme. Over the past six years, we have saved £7 billion to the lifetime cost of Sellafield, and that's worth just recognising, how many other nuclear companies are able to demonstrate direct financial saving to future programmes over a lifetime? £7 billion of the taxpayers' money has been saved by a relatively small organisation. So whilst I can sit down and have a conversation with the minister to say *'yeah, I've managed my P & L and I've grown the top line as a good business chief executive would do',* really what I want to do is go beyond that, showing our positive impact on other programmes, our communities and the nation more generally.

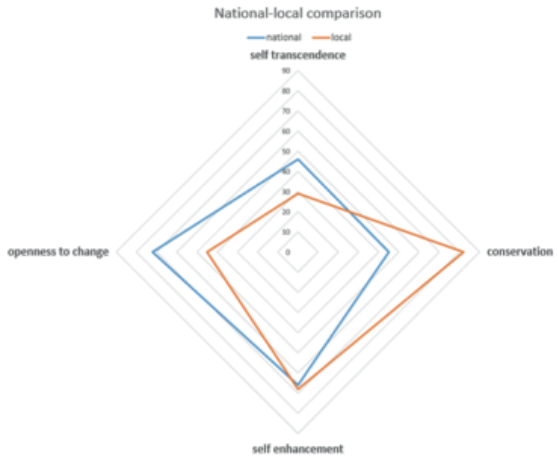


Figure 2 – Perceived Public Value of NNL at local and national levels (replace with higher resolution version in print)

We have been working with UCLan to look at our public value. We did work on a survey to understand how stakeholders and in particular NNL staff feel about where things are up and the value that they bring. Looking at the graph, it is worth highlighting in particular some of the differences that this research has shown, especially the difference between the local view, so those in West Cumbria versus the national view. Locally people tend to say 'yeah, I get it, I understand what you do, I understand why you are here' whereas the national view, we perhaps do not quite resonate as much.

And so that clearly is an observation that we need to address and we need to look at how do we address that on the national stage.

We also looked at whether people see us generating the value now or whether it's seen in the future. And this research shows us that many people see that we do generate value in the future. It is about what we are doing today, in terms of the science and technology that is realising public value in the future. That is a challenge, to plan effectively over five or more years, in a policy environment like nuclear, never mind longer. We are working on decades here, and we need to build the skills and capability now that can help to generate public value that could be decades down the line.

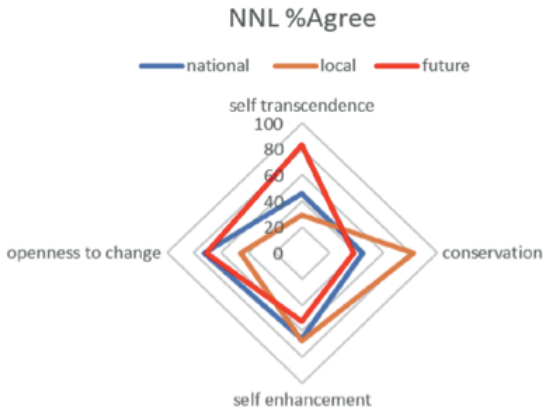


Figure 3 – Perceived public value of NNL in the future

We have also done some work as a result of this, and also some personal reflections that I have had in trying to describe my organisation. Following some time out at Harvard Business School in 2019, they very much pushed us there to say, as a chief executive, why are you actually here? Why are you really here? What is your purpose? What gets you out of bed in the morning? And also the recognition that I need to join that purpose to my organisation with a view that if those do not match, if my value system is different to the value system of my employees, then the organisation is not going to be in a good place. And the more alignment between my personal value system and between the value system of the employees in terms of actual purpose that gets you out of bed in the morning, then it could be extremely powerful. And then you realise, why we are here as an organisation and what does get us out of bed in the morning as an organisation. We get out of bed in the morning to address environmental restoration, we are here to clean up the environment, and that is really powerful, that can really resonate with people as to why they are here. We are also here to address clean energy and climate change. So for young people in the organisation to say, you can come and work in the nuclear industry, you can actually address climate change, the greatest existential threat to humankind, that will get you out of bed in the morning. You are here to safeguard nuclear material and to put in place everything is needed to protect that material. We are also here for nuclear health and medicine, which is often forgotten about, such as the development of the radioisotopes that are needed for cancer therapy. It is quite interesting, when I was at Harvard to be able to say, I have worked this out now, and in terms of why we are here, we are here to clean up the environment, we are here to address climate change, we are here to address cancer and to protect nuclear material. Many other businesses and chief executives said, 'well I just can't match that, I cannot give my business that sense of value and that sense of worth, you're in a really lucky place', but then the question is how we can utilise that going forward? When we draw it down and crystallise it to just one statement, we are here to harness nuclear science to benefit society, whatever that may be. So the work that the team at UCLan has helped us with has really enabled us to catalyse and think about this as a way forward.

In summary, our public value research with UCLan has been a very useful piece of work and it has helped us as an organisation. We are a relatively small business in nuclear, but the leverage that we get, not just from a monetary point of view, in terms of what we deliver for our customers, but this wider sense of public benefit and public value. What we are doing now with our stakeholders and with employees is really starting to communicate this out and really hit that resonance point with people.

The Nuclear Industry in Caithness and West Cumbria

Dr Rick Wylie, University of Central Lancashire, on behalf of Andrew Van Der Lem, Nuclear Decommissioning Authority and Jamie Reed, Sellafield Ltd

This paper gives an overview of the collaborations with the NDA, particularly relating to the nuclear industry in Caithness, around the Dounreay nuclear site, in that North East of Scotland in the top right hand corner of the UK, and in West Cumbria around the Sellafield site on the top left corner or England.

For the Dounreay site near Thurso we focus on the perceived change in value associated with this site over time. Then we turn to look at Nucleus, the Nuclear and Caithness Archive, which is a spectacular new facility in Wick twenty miles away from the Dounreay site and think of the justification and contribution of value to the area. Finally, the nuclear industry in West Cumbria, which we have collaborated with colleagues in the West Cumbria sites stakeholder group, which is a fantastic NDA created industry community stakeholder forum, and with Sellafield Limited. What they were interested in is providing a robust measure of value and perceptions of the industry's contribution in a wider context.

The approach for all of these has been three key elements: firstly is what we call conversations in context, which are off the record and aim to identify issues and the background strategic setting of an organisation, in particular relating to identifying the community or the group of the population to survey. Also, what is the geographical and temporal focus, is it past, present, future, is it local, national, international, what are the settings? Secondly, the questionnaires, which are tailored to the referent, and which we do on-line, face to face or both. Thirdly, the analysis which we use, based on some of the theories and frameworks in an earlier paper at an appropriate level of analysis for the different groups.

We started our public value research with the Dounreay case study, and really that was asking ourselves 'does this work'? We did this over two and a half years ago in 2017 and it was the first case study we did. We look at the results of this, how do the public – reasonable, informed citizens – perceive that the thing we are asking about, like Dounreay or like the nuclear industry in West Cumbria, how do they perceive it fits with value categories? This tackles the relationship between the industry and value categories. The value constructs, methodologies and typologies that we use purport to measure the whole gamut of human values.

The Dounreay Nuclear Site

However, we can and sometimes do summarise them quite significantly. Looking at Figure 1 later, which is just a radar diagram from Microsoft Excel, you can see that we value categories around the side, which form the axes, and you see how we plot the value score onto that. The shape of these things is important, this is not public opinion, the difference between 10% and 11% of something is not that significant, it is the shape of the diagram that is revealing.

In our research at the Dounreay site, we asked about the value over time, for three distinct stages in the life of the facility:

- 1950s-1990s - At the leading edge of nuclear science and fast reactor research.
- 1990-Present – Government announced the end of fast reactor research in the late 1980s and the last reactor was shut down at the site in 1994, marking the transition from operations to decommissioning. This is expected to continue to the mid-2030s.
- Post-closure – sometime around 2033, after all significant work is ended, most facilities decommissioned and demolished, and only a handful of workers remaining (such as security and monitoring activities).

This was the first time we had done a value profile, and we used the Maslow five categories of motivation, esteem, relations, security and existence. These are the five fundamental categories of Maslow's basic hierarchy of needs, or what we would call human value categories. We posed statements in each of the five value categories relating to each of the three periods in time. Looking at the results in figure 1, you can see the value perceptions by five categories for past, present and future.

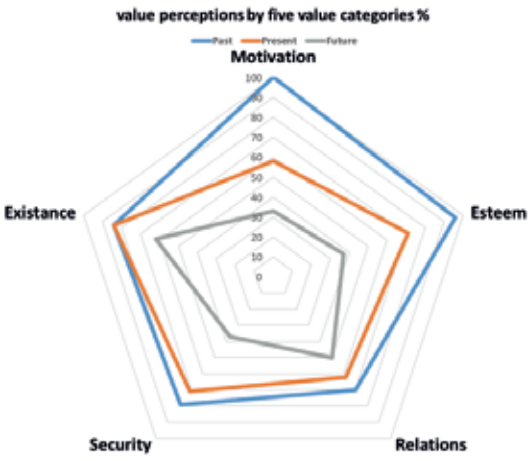


Figure 1 – Dounreay public value profile results

Just highlighting some of the key points from each period, starting with the past, you can see that the area under the lines is massive, with some categories right out at 100%, such as motivation. The clear indication here is that there is a huge perceived value in all categories for that first phase, from the fundamentals of existence, providing good jobs, security and wealth, right through to esteem, living in the North East of Scotland and at the world leading edge of nuclear science. There was something in the area had a vibrancy, something to be proud of.

We asked the same type of question again, asking respondents to think about the present, this is in decommissioning, so the site is no longer at the leading edge of nuclear science. It is being decommissioned and ultimately dismantled. You can see how, quite interesting, existence remains high, as there are still a lot of well-paid jobs up there in decommissioning, albeit not quite as many as there were. Security and relations are not hugely changed, with a slightly larger drop in perceived esteem. The significant change here was that the motivation element of this was seen to be much diminished. Dounreay been dismantled and decommissioned, no longer at the cutting edge of fast reactor research, just another decommissioning site along with many others in the UK and across the world. It is the motivation that is really hit.

So, what's going to happen in the future? This is of course asking about something which has not yet happened, and a lot can change over the next 15 years, but in the absence of anything else, as other than tourism there is not much else, you can see how the delivery of value is seen to be much diminished. Looking at the difference in the shapes of the graphs and the decline in past-material values is interesting, with motivation and esteem down significantly. Security also down, which is not surprising as if the jobs and income are gone, that stability of the community is at risk. Relations was one particularly interesting finding, it is a reduction albeit not massive. One of the things that the area has got is a very strong sense of community, but distant from the political and administrative centres of power with their council headquarters about 120 miles away in Inverness and Edinburgh being the best part of a day driving or a flight. One thing they do have, and which acts as a forum for airing and getting attention for issues of relevance to the area, is the site stakeholder group. This will likely cease when the site goes in the 2030s, but was a hope that that type of group would continue, and that there would be some relational element there involved in the community.

In review, the Dounreay findings show a steep decline in perceived value as site is decommissioned and closed, especially in respect of motivation and esteem, the post-material, higher

Nucleus, the Nuclear and Caithness Archive

order value categories. The question overhanging the future results however is the assumption made by respondents of yet to be defined post-closure support.

In that context of decline in the public value associated with the Dounreay site, we turn now to looking at a new facility in the area, Nucleus. This new facility is the archive for the UK civil nuclear industry, and the Caithness archives. It is a spectacular facility, which has won architectural awards. In the context of the Dounreay site, we thought it was very interesting to look at this and the director at the NDA responsible for the archive asked us to do a public value profile of the archive. They were very concerned in terms of the perceived value of this to policy makers, because it does look a soft target, given its cost and location.

We looked at organisational capacity and the authorising environment, particularly how this type of work would play in the authorising environment. We produced a tailored questionnaire following fifteen conversations with staff and key stakeholders around Scotland, not just in Caithness. We implemented a questionnaire on-line. And what we found during our conversations in context was huge public value potential, that there were significant internal public values in the organisation, and the staff were out there focusing on the value it could provide to the community. The dual nature of the archive, holding both the local Caithness archive and, as it arrives from individual nuclear sites when the records are no longer 'active', the UK civil nuclear archive, this lent itself to exploring the local and national public value of the archive. There are also at those 'scales' two clearly defined 'publics' and functioning 'public spheres' where we can easily identify and target questions relating to the perceived public value of Nucleus to the local public sphere and national public sphere.

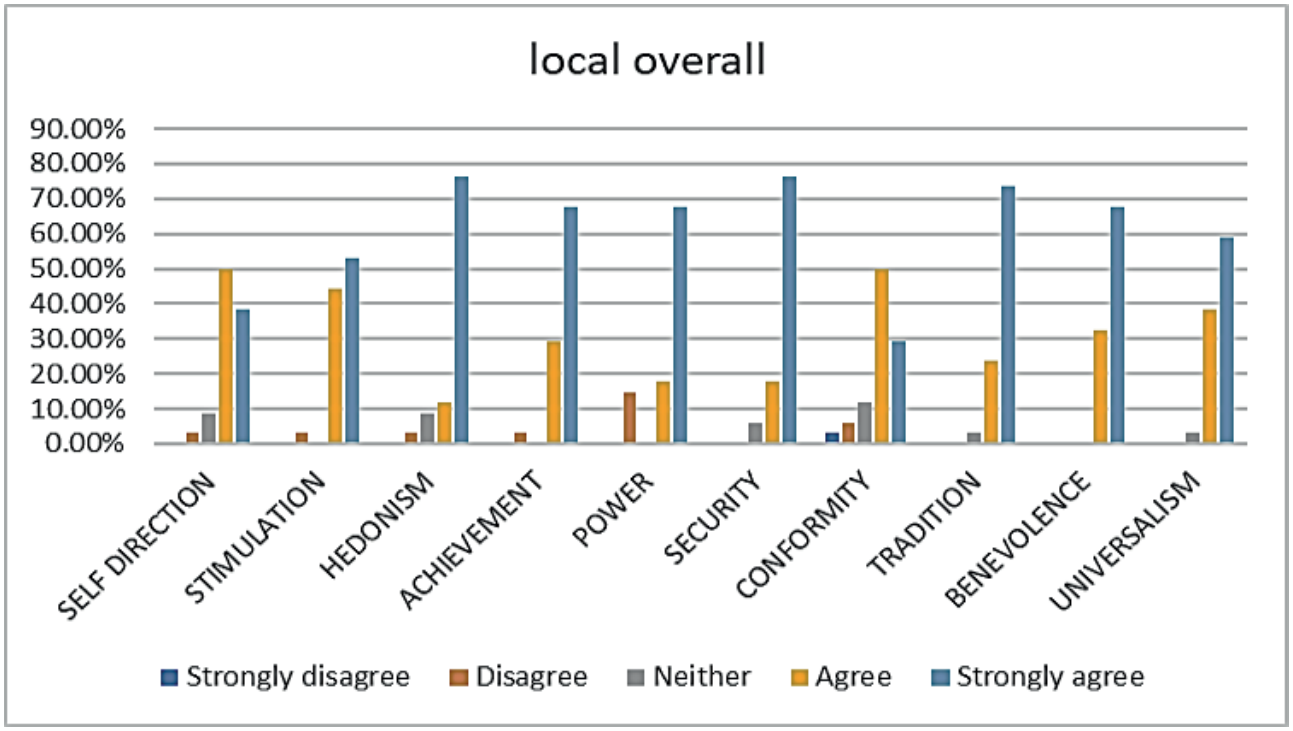


Figure 2 – Nucleus local public value profile

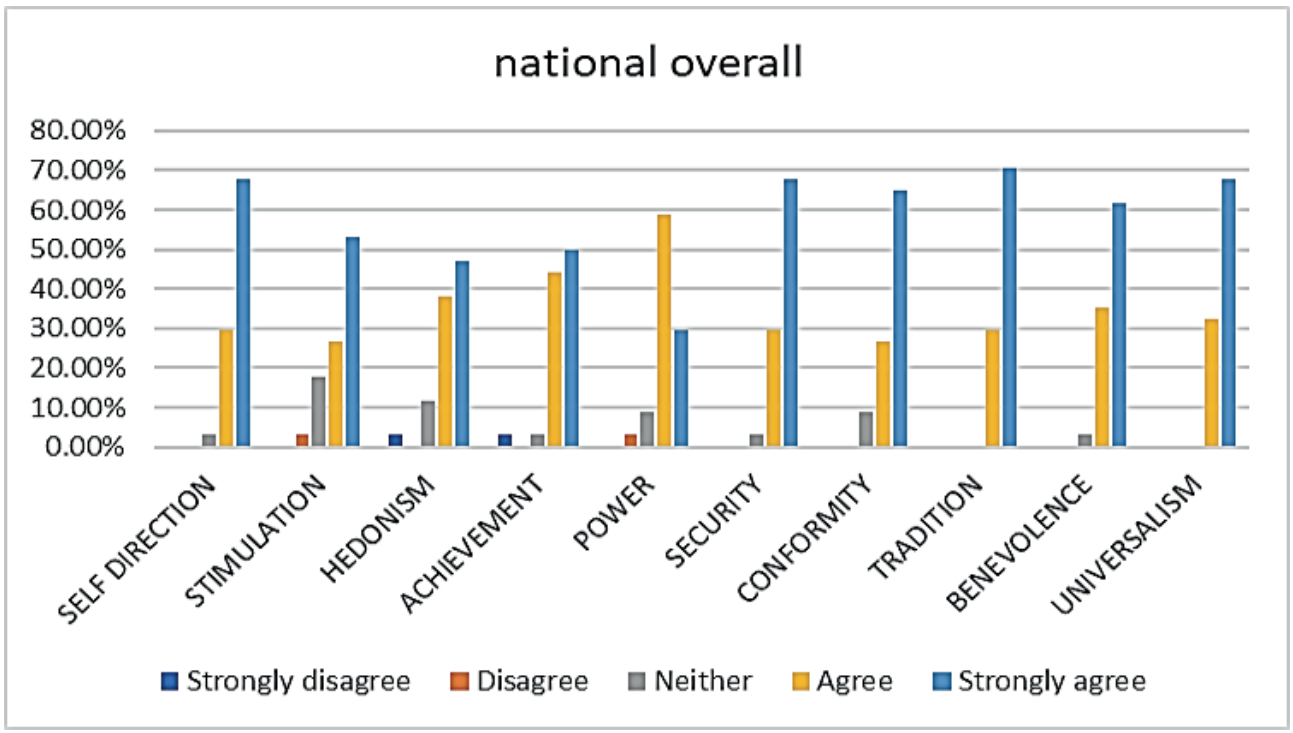


Figure 3 – Nucleus national public value profile

Figures 2 and 3 shows the results against ten Schwartz value categories, and you can see the blue bar is 'strongly agree' and the gold bar is 'agree' to propositions tapping those value categories. There is a significant amount of perceived value at the local level and a slightly different profile but a very good profile nonetheless at the national level, if you take agree and strongly agree into account. It is not wonderful, there are some holes, chinks in the armour you might say, but there is nothing fundamentally serious about it. Locally, we asked for respondents to consider the site as a local facility, from a local community perspective and we said conformity was about conforming with community expectations. It would be interesting to work out what the community expectations were of the facility. In terms of self-direction there is obviously some work to do with outreach in terms of helping individuals in the locality use the facility as a resource and a resource for learning as well. Security was good, which of course it should be with sensitive nuclear records, and valued local ones. The local archives preserve tradition, benevolence and universalism. It is a positive story, albeit with a couple of chinks in the armour which targeted interventions could address.

For the national profile, we asked the same respondents to think about Nucleus at a national level. We could see that one of the issues there, the only chink in the armour again was power, people perceived that there was perhaps a response issue in terms of its ability to respond to community demands at a national level, perhaps related to the facility being so very remote. This did reveal the material/post-material dimension, where at a national level it does conform with a universalism, which is helping others, social actualisation, self-direction and stimulation. So in terms of the contribution to the national public sphere, it is very positive in material and post-material value categories. You can see the top half of the diagram is about more post-material values and the bottom half of the value profile is more about material values. If you just take the overall shape, the outline of the brown and the blue shape, you can see that it's a really good public value profile for this facility.

This has to be looked at in its context. Nucleus is going to be around for years, decades, hundreds and hundreds of years. That is in the context of the nuclear industry, which locally at Dounreay has a little over a decade, and nationally there has been both no significant revival for new reactors, and Scottish Government policy is specifically against new nuclear. So very significant public value contribution to the public sphere and to individual lives, and of course for the NDA, there is a significant potential for framing and messaging for that.

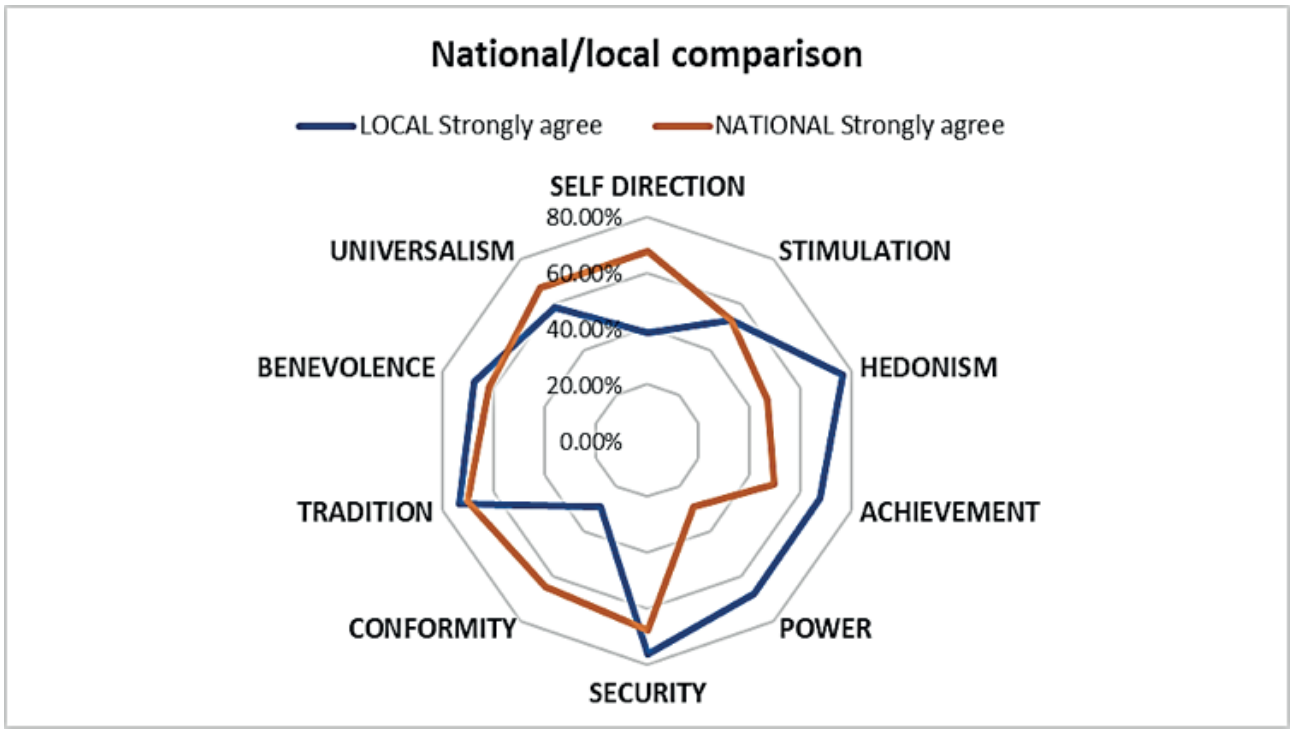


Figure 4 – Local and national public profile comparison

The Nuclear Industry in West Cumbria

This is our most recent public value profile, and this was really about the snapshot, the moment in time it was conducted in 2019. The nuclear industry in West Cumbria is going through decommissioning. Sellafield is a very large, complex facility, which of course, like Dounreay, was and still is economically dominant of the local area. The nuclear industry in West Cumbria includes the Sellafield site, the National Nuclear Laboratory, the Low Level Waste Repository near the village of Drigg, and of course

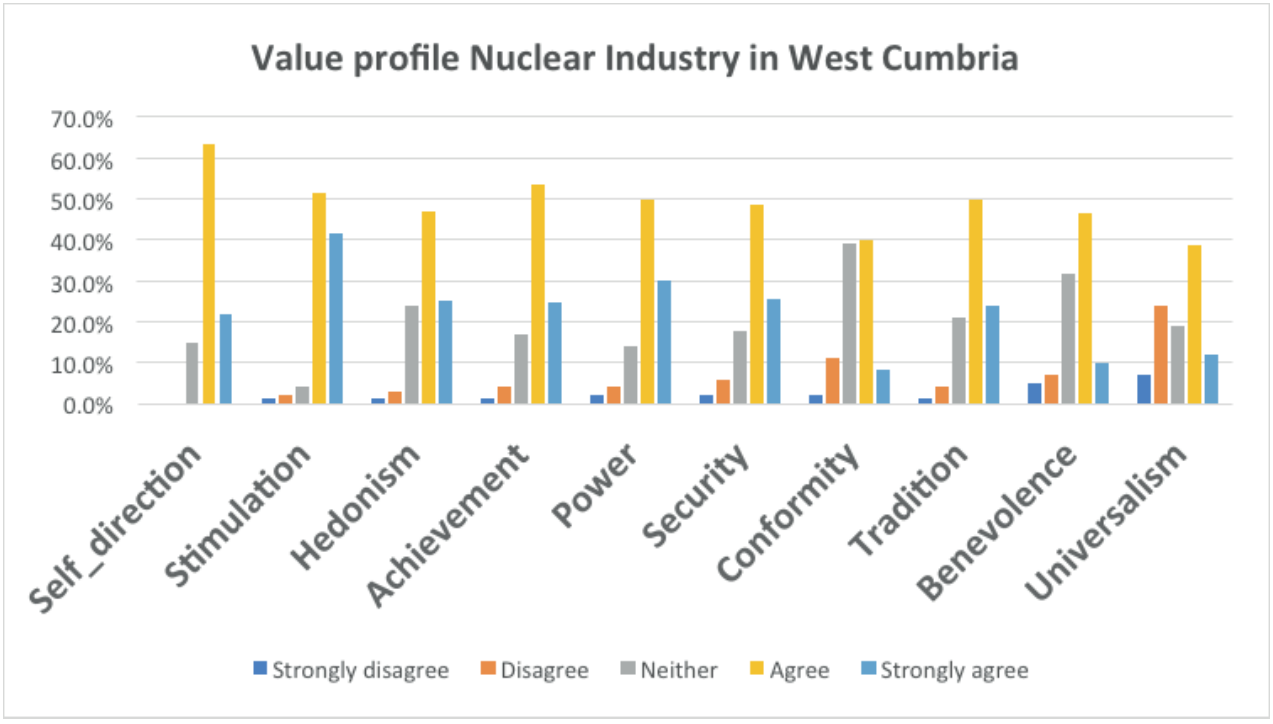


Figure 5 – Public value of the nuclear industry in West Cumbria

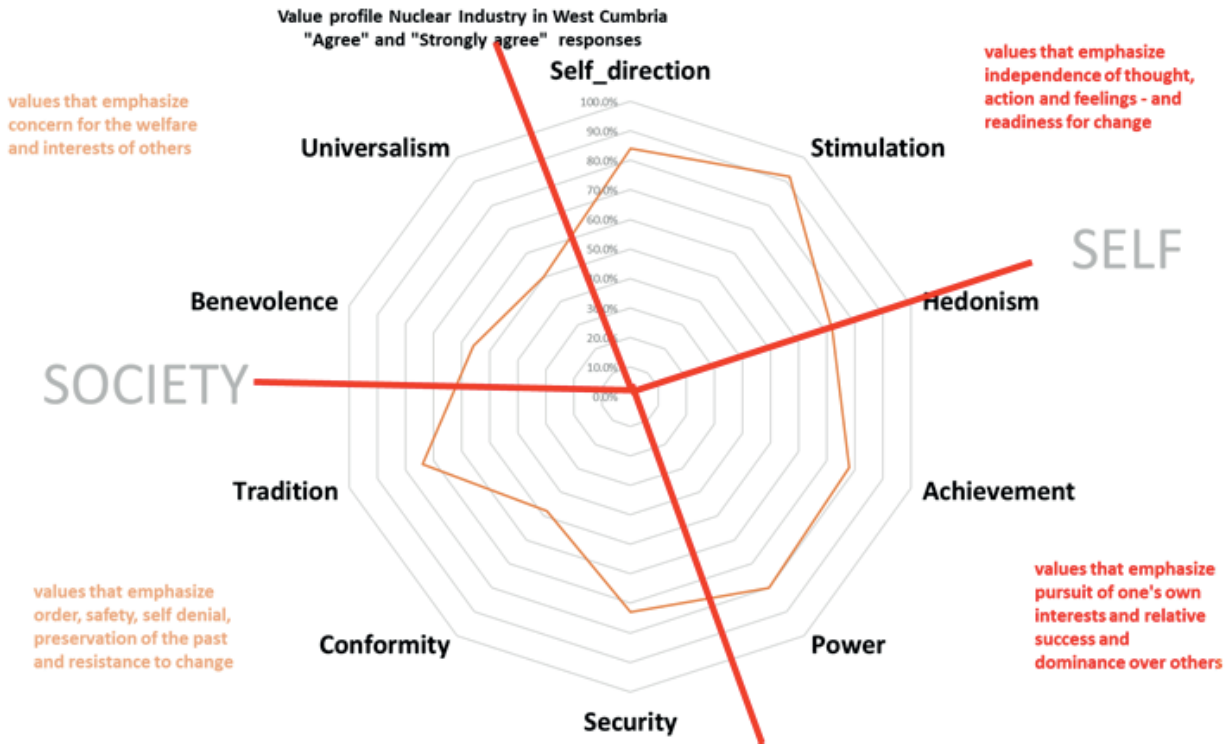


Figure 6 - Public value profile with broad categorisations for the nuclear industry in West Cumbria

the supply chain, with concentrations at sites such as the Westlakes Science and Technology Park near Whitehaven.

We did this work with the West Cumbria Sites Stakeholder Group, the opposite number of the stakeholder group around the Dounreay site and other nuclear sites. They have extensive relationships with sites, regulators, communities, and stakeholders from industry. We also surveyed members of the Britain's Energy Coast Business Cluster, the nuclear supply chain. These were reasonable, informed citizens.

The value profile is seen in figure 5. Again the agree is are the gold bars and strongly agree are the blue bars and this was quite interesting. We still have some work to do here with Sellafield and the NDA relating to this. Looking at the radar diagram, it can be split in half, where on the right hand are values that relate to the self and to the left of the red line are values that relate to self in society. To cut a long story short this revealed that it's perceived to be quite selfish. This was the perception of this point in time, and the industry was not perceived, from the evidence examined so far, to make a very significant contribution to the welfare and interests of others, tradition and conformity to community expectations. This, notwithstanding the work that Sellafield and NDA do in the area, which might not be sufficiently reflected in the results we achieved, hence the need for more work.

In review, the preliminary West Cumbria findings, show significant perceived material contributions. Lower values that emphasise concern for the welfare and interests of others. Perhaps a suggestion that it lacks a wider contribution to the public sphere, or it may be about awareness of that contribution. Without Sellafield and the industry, there would not be a whole lot of a public sphere in West Cumbria, so there is at least clear messaging implications at the most basic level arising out of this profile.

Conclusion

Where do these results take us? Two elements to this, firstly there is an organisational structure and capacity for public value. This includes an internal focus in terms of public value, the internal public values within an organisation, and external facing, the public value within an organisational strategy and public value messaging and framing of an organisation in its communications. This is the type of work that arises out of these profiles and others we have conducted, and where we can help organisations towards taking management decisions arising out of their profiles to build upon, enhance and deploy their public value.

About the University of Central Lancashire

In 1828, the University of Central Lancashire was founded in Preston as the Institution for the Diffusion of Knowledge. 'Ex solo ad solem', or in translation, 'From the Earth to the Sun', has been its motto ever since – helping talented people from all walks of life to make the most of their potential.

Today the University is one of the UK's largest with a student and staff community approaching 38,000. Internationally the University has academic partners in all regions of the globe and it is on a world stage that the first class quality of its education was first recognised. In 2010, the University became the first UK modern Higher Education institution to appear in the QS World University Rankings.

About the Samuel Lindow Foundation

The Samuel Lindow Foundation is an independent educational charity operating since February 1992. The Foundation works with its education partner and member, the University of Central Lancashire, to conduct and publish research into real problems facing real people in the real world.

The Foundation seeks to advance the education of the public, and to do this it conducts research, publishes the results and is establishing an educational institution in West Cumbria, and by doing these the Foundation aims to secure real public benefit. This institution is centred upon, but not limited to, the Foundation's physical buildings on the Westlakes Science Park, in Moor Row, Cumbria.