Chancellor, Distinguished Colleagues, Ladies and Gentlemen.

To begin, let me salute the National University on its 100th birthday! It has played an immense, and multi-faceted role in nurturing the successes of the Irish state and society in the 20th century. Happy birthday NUI!

I turn, now, to the topic of the session. I cannot pretend that I have the competence to identify, dissect and solve, in 20 minutes, even the important, let alone all of the challenges facing universities, globally, during the 21st century – a century that will inevitably see an unprecedented pace of change. Alone, the term "university" would take 20 minutes to define; it covers such diverse organisations as the almost 100 mono-specialty, teaching institutions in Vietnam, on the one hand, to the complex, researchled, multi-disciplinary seats of learning in Oxbridge and New England, on the other. Aside from extra-ordinary diversity in mission there are, of equal magnitude, differences in scale, governance, internal organisation, and resources.

I will confine my remarks to challenges facing those institutions that today subscribe to the philosophies of Humboldt or Newman, institutions whose raison d'etre is to create knowledge, to transmit it and to promote its application, in the interest of society. Excellent universities, pursuing this mission, will be critical to the social, cultural, and economic success of Ireland and Europe in the 21st century. At the commencement of the century, Irish and European universities are good, but they are not, with few exceptions, excellent, they are not equipped to meet emerging challenges of the times and the pre-eminent issue for us today is

how to convert them from good to excellent. My analysis relies greatly on two significant recent publications, namely "Tertiary Education for the Knowledge Society" an opus in two volumes published in September 2008 by the OECD, and a monograph from the Centre for European Reform "The future of European Universities: Renaissance or Decay?", authored by Richard Lambert and Nick Butler, published in 2006, as well as my own experiences.

STRATEGIC VISION

Major Issue No 1 for Universities in the early 21st century is the fact that neither Irish nor other European societies nor governments have developed a coherent strategic vision or plan for Higher Education in Ireland or Europe.

Here, in Ireland, the Minister for Education and Science, of the day, promised to establish an expert group to establish a strategic plan for higher education, one year ago. The anticipated outcome, a policy framework for Irish higher education, must set out a clearly defined mission for our universities, in harmony with the national social and economic objective to place Ireland in the first rank of developed countries, - a construct described as "a world-class knowledge economy". Realistically, what is needed is a plan, not another set of aspirations, a plan that must reconcile the existing multiplicity of discordant public policies. The plan must include implementation proposals and a plausible funding model. It must be bold, cast aside the shackles of late 20th century political correctness and state categorically that universities play a unique, irreplaceable role in the genesis of knowledge (the fundamental ingredient of that new economy) and universities must be

selectively nurtured to be successful and productive. A manufacturing economy of the past required investment and promotion of institutions delivering skilled operatives; a "knowledge economy" demands invention, innovation and knowledge creation" the business of universities. So let's stop the pejorative references to ivory towers and focus on making the universities fit for the 21st century.

Two critical components of any "fit-for-purpose" plan will be clear definitions of accountability and autonomy. It is essential and appropriate that universities will continue to receive substantial public funding (more on this later) and it is essential and appropriate that society or government should enjoy measurable and excellent returns, that are in compliance with the national policy agenda. Clarity on value for money must be established through agreed key performance indicators, that are valid and measurable. Not all returns from higher education are easily tangible, measurable or reproducible of course!

A cardinal error, perpetrated throughout Europe in the 20th century, by those charged with ensuring greater return on public investment in universities, has been the assumption that ensuring greater accountability equates with diminishing autonomy. This has been a grievous mistake. Lambert and Butler have reported convincingly the inverse correlation between measures of university research output and global standing on the one hand, and measures of university autonomy on the other, among international universities. Those European university systems suffering heavy state intervention in governance, management, leadership appointments, or resource allocation, perform poorly

compared with their European counterparts enjoying greater independence of operation, or with American private sector institutions. Put another way, operational independence from the state confers distinct competitive advantage on universities.

While we, in Ireland, are exempted from the worst excesses of state intrusion seen in other parts of Europe, there is a worrying trend emerging. Recent interventions by Irish government departments to micromanage pay of individual staff in our universities, elimination of the fundamental incentivisation tool necessary for effective management, coupled with political threats to engage in "detailed audits" of teaching loads, are a concern. Individual institutions should not be micromanaged by external agencies lacking the sectoral experience, knowledge or skills to so do. In essence, universities should be judged and funded on the basis of their effectiveness in delivering pre-defined, relevant outcomes, agreed in advance with government, in return for its investment. The policy proposals set out recently by the OECD, for better steering of higher education, by governments require early adoption in Ireland.

Continuing on the matter of strategy, policy and planning, other key elements of a national plan must include coherence in the distribution of educational roles among diverse forms of higher education institutions (institutes of technology, colleges of further education and so on), ensuring diversity of mission, prohibition of mission drift, better managed interfaces between the various elements of the education longitudinal life-cycle – that is efficient interfaces with secondary education and with life-long learning, promotion of university engagement with regional communities

and organisations, and with clear anchoring of the universities' role in meeting the needs of the outside world, of society.

Finally, key to the success of the Minister's strategy or planning project, will be the involvement in it, of globally experienced experts – avoiding the common mistake of "seeking Irish solutions to Irish problems". Attaining excellence in higher education is a global challenge; some societies have been remarkably successful in some aspects, few have been wholely successful. If we had all the answers, we would already be top of the class; so let's engage the best in the world to help us be the best. And this exhortation does not apply only to the selection of education experts for the project; societal stakeholders, key to deriving a relevant plan (whether from business, culture, industry or politics) should include both domestic and international experts.

RESOURCES

I turn now t the second major for universities now, and forever, ensuring the availability of sufficient resources or funding to enable the achievement of excellence in pursuit of the university mission. A feature of university education in Europe in recent decades has been the somewhat schizophrenic mantra that access to university education must continue to grow, that universities must serve ever larger numbers of students with increasingly diverse educational backgrounds, levels of attainment and academic ability, while demanding that universities deliver performance of ever higher quality by these students – all in the setting of diminishing per capita resources. Perversely, in Ireland, these objectives are demanded in a context where the state fixes the income of each university, insists on being virtually the sole

payor, continually reduces its payment in real terms, and, at the same time goes on to impose ever-increasing pay costs. Here, I am not describing practice in an era of sharp economic decline; this occurred throughout what we now wistfully refer to as "the good times"

To quote Lambert and Butler: "There is no simple correlation between spending on tertiary education and economic growth. But there is plenty of evidence that the top US research and teaching institutions have played an important role in American technological and economic achievements, and there is a correlation between a country's higher education attainment levels and its economic prosperity". Ireland, and Europe will compete successfully in the 21st century only if there is alignment between resources invested and the educational ambitions espoused, to the degree exhibited by our global competitors. Latest OECD figures show that we are at the bottom of the first tertile in per capita spending in higher education and yet we aspire to performance in the top quartile.

On the matter of resource allocation, the OECD document sets out at length the principles to be adopted in allocating public funds for higher education, and, in fairness, Ireland has moved a long way in the past 10 years towards meeting best practice in transparency, targeting of developmental funds, promoting greater access by disadvantaged elements of society, greater equity, and in developing a contractual relationship between the university and the state. However, we fall far short of best practice in virtually every other OECD policy recommendation for optimising

institutional support, institutional cost-effectiveness and in providing individual student support.

The current gap between what we aspire to and what we are prepared to pay for, is unsustainable and the solution demands courage of political leaders and of university leaders in curbing rhetoric. I welcome recent Irish government signals of political willingness to respond to calls from university leaders to introduce (or re-introduce) cost-sharing models, in use for decades among competing countries, as well as in fellow EU member states. Of course, we fear government temptation to substitute student fees for public funding (effectively introducing indirect taxation) rather than grasping the opportunity to supplement public funding to deliver total resources in line with the best in world - where we Mirroring the courage of the Minister, university aspire to be. leaders must also be prepared to take some bold steps, some equally challenging in the internal politics of universities. We must examine and test new models for acquiring resources, including, perhaps privatisation of some of our endeavours, charges for enhanced services (analogous to business and first class seats on airlines). bond issues, philanthropy enhancement, greater encouragement of alumni contributions, long established practices in other western democracies. A willingness to accommodate much larger numbers of international students, of appropriate academic achievement and capacity, if necessary, at the expense of some domestic students lacking necessary academic attributes, may have to be countenanced in order for universities to be able to afford, by cross-subsidisation, the quality of education deserved and needed by Irish students. Such a construct is not new to those of us with experience of Irish medical and dental education. We

must promote more effective and efficient use of resources, employ staff performance management techniques long evident in international private universities; we must have access to and employ incentivisation of excellent performance.

Of course, all such developments must be carefully designed to comply with public policy on access and equity – through subsidy for Irish students with demonstrated academic ability but with insufficient ability to pay – well developed approaches in common use in the US and UK.

The challenge posed by International Rankings.

During the 20th century, a small number of ancient, elite and consequently wealthy universities in Europe and the United States powered ahead. Europe and Ireland acquired an insatiable appetite for higher education, and, to meet demand, hundreds if not thousands of new higher education institutions, asserting the status of university, sprang up. However, by 1990, a new dynamic emerged in Europe. Success in economic competition began to depend less on capacity to build and manufacture, and more on innovation and invention, processes that are expensive. Higher quality, research-led, or research-informed teaching became the gold standard. The level of educational attainment necessary for career success escalated from batchelor to master and onwards to degrees, requiring more sophisticated experienced doctoral teachers and mentors. With insufficient numbers of suitably qualified academic staff, inadequate infrastructure and equipment, most of the widely dispersed, relatively small scale, disunited European universities have had to scramble to compete for limited academic talent.

In parallel with these developments in Europe, ever larger numbers of increasingly mobile students in other continents began to seek out the best education that the globalised world has to offer – over 2 million crossing borders annually at present. Universities have recognised the value of this market, the intellectual potential it presents, and the opportunities to earn much-needed cash. Aggressive competition for students has emerged.

Thirdly, within Europe and elsewhere, governments recognising their inability to fund ever higher costs of high quality education through taxation, have shifted costs to the beneficiaries, individual students. These students, sacrificing other life choices for higher education, seek the best returns, and do so in what they believe to be the best and most prestigious universities. To serve them, to serve mobile talented academics, to identify and celebrate best performance, international university rankings have been born.

For universities in Ireland, and in other European nations, there is a new imperative, to compete:

to retain our best native students who will be attracted by more highly ranked international institutions;

to retain our most ambitious staff in the face of similar pressures; to protect the international status of our degrees and the competitive position of our own graduates on the employment market;

to attract smart internationally mobile staff and students from other countries and thus to enable the international acculturation of our own students in Irish institutions, who are bound to compete for

business in other continents, if not bound to compete even for their jobs there.

If Irish universities are to succeed, if Ireland is to be successful in future, we must meet the challenges identified by international rankings. Some continue to deny their relevance. However, when I visit a university in China, Malaysia or the Middle East, not a single university leader, or student seeking overseas education, is unaware of the position of UCC, this year, in The Jiao Tong, Shanghai or Times Higher Education Rankings. There is no hiding place, notwithstanding polite discussion of the limitations of those ranking methodologies. And, it is my opinion, that as the methodologies are refined, Irish universities are likely to decline in these rankings, without urgent and decisive action.

In a 20 minute talk, it is just not possible to set out in detail all the elements of the solution. In the case of Irish universities, clearly we must address the specific challenges I have outlined, in national planning, resource provision, internal university reform. But, beyond that we will have to rationalise the system. I do not believe that we can afford seven free-standing, competing universities into the future. The secret to success for Irish universities (and pari passu for our economy and society) will be the design of a new system that will serve regional needs for tertiary education, while allowing the harnessing of the totality of expertise in our university system towards excellent, fourth level research, scholarship and innovation. There are, of course steps being taken currently to promote greater co-operation, but it is not credible that we can achieve maximum efficiency and effectiveness in this agenda without new governance arrangements. To effect this, we will require strong, visionary leadership within and without the universities.

I have not yet mentioned the implications of the Information Technology Revolution. We all acknowledge the opportunity it presents for distance education, for continued life-long learning by those unable to attend campus. Opportunity only, or perhaps a Did anyone watch CNN coverage of US presidential threat? election night this year? Did you see the interview of the holographic representation in the Atlanta studio, of the CNN reporter who happened to be standing in Grant Park Chicago at that moment? Did it cross your mind that a CNN equivalent in the university sector (say Harvard), with its multi billion dollar endowment, might just be planning to market live, interactive, holographic lectures by Michael Porter to you, or worse still, one of your competitors? How might we compete? Whose lectures will we be selling to earn the revenue to buy that Harvard, live, interactive, holographic seminar by the global star? There will be an Irish university education brand 100 years from now, but it will result from the adoption of a new heraldic crest and motto: "Ni neart go chur le cheile"!

My final point this morning addresses the issues for Universities as Institutions of Conscience Confronting Power.

History is replete with the roles played by academics, students, intellectuals and artists in dissent against regimes. Examples might in our the lifetimes might include Dubcek Spring in Prague, the student revolt in Paris in 1968 or, again, the 1989 student protest in Tien an men Square. The advent of democratic

government might be supposed to have obviated the need for such a role for universities now, at least in Western Societies. We might be expected to respect the absolute rights of parliament in a democratic society – with no further public role for university led opposition. This, in my view, would be a profound mistake. The legitimacy of government derives from, and the essence of democracy is founded on, informed public opinion and unfettered, open public debate.

In Ireland, Europe, or indeed any country today, what the majority of people know about politics, sport, religion, culture, and science, they know through television, radio, press or the Internet. For most citizens, the media are arbiters of truth: what is real and important is what can be seen on the television news. They influence societal ways of thinking and they influence behaviour. Can we say, in an era of monopolistic ownership of major media outlets in much of western Society that we enjoy informed public opinion or that we enjoy truly open public debate? Can we say that the public need for unbiased information necessary to make informed electoral decisions is prioritised sufficiently, by print and electronic media, ahead of sales enhancing sensationalism, entertainment, and trivial "human interest" stories?

The influence of universities in society, in the 21st century will, whether we like it or not, depend on the access of universities to the world of the mass media. And this will pose a big challenge. Apart from developing skill-sets among academic staff that are "media savvy" there will always remain the challenge to translate the discourse of the academic milieu into the style of mass media. But do it we must, for two reasons: (1) for the greater good of society, ensuring the healthy discourse that legitimises our

democracy and (2) in pursuit of university self-interest, to protect our autonomy.

To close, let me re-iterate a fundamental truth. Ultimately, universities remain the most exciting, challenging, stimulating, maddening and frustrating places in the world, in which to work. They have a 1000 year history, have survived wars, insurrections, famines and despots, and few if any have disappeared. They are inhabited by the smartest and most ingenuous people of our age, of any age, who will always exhibit the capacity to adapt, if for no other reason, than the perpetuation of their self-interest. The issues for their leaders may be numerous, may be complex, may even be grave, but I have no doubt that they will be surmounted by the aggregate intellect of university communities.

Thank you for listening.