
Analysis of the Regional Forest Agreement Policy and Comprehensive Regional Assessment Process in NSW

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*Rational analysis, carried on in an ignorance of political reality, may well
end up so divorced from social reality as to be of little use to anyone.*

Walter Rosenbaum

'Reserves have had a deleterious effect on the evolvement[sic] of that forest'

Hon. Wilson Tuckey

Federal Minister for Forests and Conservation

ABC Radio 19/12/98

Introduction

The Comprehensive Regional Assessment of forests in NSW took place between July 1996 and February 2000. This extensive process has resulted in the signing of four Regional Forest Agreements. A number of contemporary natural resource management concepts can be applied to this process and policy to determine its efficacy and adequacy in meeting stakeholder objectives and theoretical requirements. The author was involved in the process from July 1994 till December 1999 and represented the conservation movement at Comprehensive Regional Assessment negotiations and on the Environment and Heritage Technical Committee instigated as part of the Comprehensive Regional Assessment.

Background

The 1980s saw the Commonwealth wielding interventionist policies over the States¹ regarding environmental issues. However the negative reactions the Hawke government received in early 1991 over the issue of banning mining at Coronation Hill, in the Kakadu Conservation Zone², created an unwillingness to continue this practise (Beer & Ziolkowski 1995, Hamilton 1996). With the Resource Assessment Commission undertaking an evaluation of the costs and benefits of ending logging in the National Estate forests of southeast NSW and east Gippsland, due to extensive protests in the region by conservation groups, the Commonwealth sought to divest itself of further political discomfort over forest issues. The *Forest Conservation and Development Bill* 1991 (Cth) was aimed at resource security and outlined a process similar to a Comprehensive Regional Assessment (CRA), however it was defeated in the senate (McDonald 1999).

¹ Fraser Island and the Franklin River decisions are examples of the Commonwealth using its external affairs and corporations powers respectively to override State interests.

² This was as a result of the Resource Assessment Commission conducting a 'contingent valuation' survey of the environmental values of the area.

At the same time Australia was following the United Nation's lead³ in developing the National Strategy for Ecologically Sustainable Development (NSED). The ESD Forestry Working Group⁴ recommended:

- ◆ joint assessments by State and Commonwealth governments of old-growth forests
- ◆ the development of intergovernmental agreements providing for joint integrated assessment of forest land-use options
- ◆ lifting export controls on plantation woodchips (ESDWG 1991)

The NSED was released in 1992 along with two other important policy statements having implications for forest use, the Intergovernmental Agreement on the Environment (IGAE) and the National Forest Policy Statement (NFPS). The IGAE states natural resource and land use decisions should use ESD (IGAE 1992 p19). The NFPS obligates governments to establishing a comprehensive, adequate and representative (CAR) reserve system by the end of 1995, joint development of criteria for a CAR reserve system and a CRA to determine which areas should be included. It also states the regional forest agreement (RFA) following the CRA will also accredit the CRA for the purpose of evaluating forest resource use impacts of proposed development projects (CoA 1992a).

Accrediting the CRA relates to s 51 of the Constitution, which gives the Commonwealth power over exports⁵ (Harding 1998 p.227) and in combination with the *Environment Protection (Impact of Proposals) Act* 1974 (Cth) required an environmental impact assessment for export woodchipping. RFAs were intended to allow the Commonwealth to withdraw from altercations over forest issues (CoA 1995b). Little progress was made on the NFPS which lead in 1994-95 to inter-departmental conflict at the Commonwealth level⁶ and successful legal action over renewal of export woodchip licences⁷ (Drielsma 1999, Forsyth 1998). Public tempers also ran high with the conservation movement protesting on the lawns of Parliament House in November 1994, a timber industry blockade of Parliament House using log trucks in January 1995 and 50,000 people marching nation-wide in anti-woodchipping protests in February 1995 (TWS 1995).

On the NSW front the Labour Party came to power winning the March 1995 election by one seat. The new Premier had promised publicly to 'Save the Forests' and privately to end export woodchipping by the year 2000 (Carr 1995). Both governments moved to quell disquiet by implementing a clause of the NFPS that until CRAs were completed, forest management agencies will avoid damaging areas of high conservation value. This lead to moratoriums termed Deferred Forest Areas (DFA). Though extensive these were not delineated on a conservation basis but as areas not wanted in the immediate logging schedule of forest agencies (Clark 1995). This was obviously unacceptable to conservation

³ Begun by the UN in 1987 with *Our Common Future* and significantly advanced in 1992 through *Agenda 21*.

⁴ The ESD Forestry Working Group had no representation of conservation groups due to a belief it was too biased towards high levels of logging (McDonald 1999).

⁵ Legislated through the *Export Control Act* 1982 (Cth).

⁶ John Faulkner, the Minister for the Environment, recommended to David Beddall, Minister for Resources, that 1297 forest coups be excluded from woodchip licence renewals because of their high conservation value. However Beddall excluded only 85 areas and increased woodchip export quotas.

⁷ The Tasmanian Conservation Trust challenged Gunn's licence over Beddall not following required procedure by ignoring Faulkner's advice. The Attorney-General office indicated 10 of 11 licences may be illegal.

groups however the NSW government had promised to undertake an Interim Assessment Process (IAP) before coming to office.

The IAP took place in April 1996, providing a practise run for the CRA and renegotiating moratorium areas in NSW based on the Scoping Agreement for NSW RFAs and Commonwealth Proposed Criteria for National Forest Conservation Reserves⁸ (RACAC 1996). The Scoping Agreement also stated that criteria for biodiversity targets in the CRA would be those agreed to by JANIS (CoA & NSW 1996). The criteria were finalised in 1997 and set specific targets for forest ecosystems, old growth and wilderness but only general ideals for species. The main change to the final version was the inclusion of the proviso that targets should be met where practicable, thus allowing economic concerns to vary the CAR reserve system.

Significance of the forest estate

At the time of European settlement forest covered only 9% of Australia, by 1996 this area had been reduced by 40%, only 25% remained unaffected by harvesting, and only 16% of what remained was in the reserve system (SEAC 1996). In NSW in 1996, 29 % of the forest cover was found to be 'likely old growth' forest and half of this occurred on State Forest estate (NPWS 1996). The forest estate harbours a significant proportion of Australia's biodiversity, much of which is old growth dependent. Economic values from the forest estate include approximately 10,000 people employed in hardwood timber extraction and processing, paying \$270mil in wages and generating \$900mil in sales in 1993/94 (SFoNSW 1995). The forest also provides employment through tourism, beekeeping and other minor uses. It indirectly provides economic wealth through the continuation of environmental processes such as water catchments. Social values include recreation, aesthetic and spiritual uses.

Stakeholders

The commons-based nature of many environmental problems can make stakeholder identification arduous (Spyke 1999). In addition the large area involved in this process made the list of possible stakeholders extensive. At a high level of involvement within the CRA process were representatives of both State and Commonwealth government departments, timber industries, timber unions, conservation groups and the Aboriginal community (TERFA 1998). At a lower level the Regional Forest Forums (RFF) provided for input from a wider community interests including tourism, academia, bushwalking, apiarist, farming, mining and catchment coordination groups (TERFA 1998).

These stakeholders represent both private and public interest groups⁹ with varying abilities and rational for being involved. Private interest groups have considerably more financial resources at their disposal while public groups rely more on moral suasion to effect power (Doyle & Kellow 1995). Environmental groups may have difficulty in working with government as an interest group due to their sometimes uncompromising morality,

⁸ These criteria saw four versions appear each year from 1994 to 1997. The first was a draft produced in August 1994 by the Technical Working Group on Reserve Criteria established under the Joint Australian and New Zealand Environment and Conservation Council/Ministerial Council on Forestry, Fisheries and Aquaculture NFPS Implementation Sub-committee (JANIS). Next came a version in July 1995 produced by the Commonwealth after advice from an *ad hoc* Scientific Advisory Group (CoA1995a). A heavily revised version appeared in July 1996 (JANIS 1996) and the final version agreed to by all States and the Commonwealth in 1997 (JANIS 1997).

⁹ Private interest groups offer rewards to a specific membership whilst public interest groups offer rewards to the whole community (Doyle & Kellow 1995).

suspensions of hierarchy, formal organisation and distrust of secrecy (Doyle & Kellow 1995). An example of these suspicions is provided by Friends of the Earth, 'by 1998 the NSW ALP Govt was so successful in capturing and seducing Carr's Greens, as well as marginalising the National Greens, it felt politically safe' (FOE 2001). The time required for Aboriginal community decision-making processes can disadvantage this group in formal processes (Docker 1998).

Values

The basic value systems of stakeholder groups appeared to extend to the extremes of the environmental ideologies in Table 1. The conservation movement consisted of groups with both 'Red-green' and 'Dark green' value systems, however the 'Dark-green' values were rarely expressed publicly. For example the North East Forest Alliance which undertook regular forest blockades produced an employment vision paper claiming 'new job creation opportunities in NE NSW rely on a new vision of forest based employment' (NEFA 1998). Similarly timber industry groups expressed either Cornucopian or 'Light green' views privately but only 'Light green' views publicly. The sawmilling and woodchipping company Boral has stated, 'forest management practises and community expectation will change' (Betts 1998). The differences in these value systems makes even extensive public deliberation less likely to work and consensus decision making may not be feasible in these circumstances (Moote *et al.* 1997, Neumann 1999, Wondolleck & Yaffee 2000).

Table 1: Environmental ideologies

Cornucopian	Accommodationist Managerialist 'Light green'	Communalist Ecosocialist 'Red-green'	Gaianist Utopian 'Dark green'
Optimistic about growth in resource use and technological fixes	Resource use and economic growth can continue if sustainability is ensured and compensation made	Belief in intrinsic importance of nature and cooperation in establishing sustainability	Belief in rights of nature and co-evolution of human and natural systems

(Adapted from Fien 1993)

The CRA process

The CRA process for NSW took place between August 1996 and December 1999 and consisted of a number of levels of organisation. A steering committee with initially major stakeholder representation coordinated the process and was supported by four technical committees. These four technical committees also had major stakeholder representation and dealt with the themes, environment and heritage, economic and social, ecologically sustainable forest management, and forest resource and management systems. Further input was obtained regionally from the RFF, which had a diverse stakeholder membership. This structure represented a 'top-down hierarchical planning process' (EHTC 1997 p7) where change did not flow to higher levels. Four regions in NSW underwent a CRA and subsequently negotiations over a CAR reserve system. A number of aspects of the CRA significantly affected its value as a decision-making process.

Scale

The forest on the eastern seaboard of the State was divided into 4 major regions: Upper North East, Lower North East, Southern and Eden. The boundaries of these regions were

pragmatically designed on the basis of timber supply and political necessity. The Commonwealth's desire to distance itself from export woodchipping controls meant all areas of forest that underwent woodchipping had to be included. This resulted in the Southern CRA region stretching far west to cover the concession of the Tumut woodchip mill, an area covering 6,140,298ha. In doing so it intersected five IBRA regions¹⁰ and numerous social and economic boundaries. However the south east corner surrounding Eden was placed into a separate region of only 814,254ha. This was due to the political history of the region regarding the biggest forest demonstrations in Australian history and the State Labor parties' promise before coming to power to save the south east forests. These two very different assessment scales covered many different levels of ecological processes but had identical assessment processes.

Ecological processes occur at a number of different scales and thus require managing at different scales (Ostrom 1995) otherwise the spatial differences between natural and human systems may exacerbate environmental problems (Dovers 1995). Assessment of the effect on biodiversity of climate change was proposed by conservation representatives but not considered in any of the CRAs due to a belief it was too difficult to incorporate at regional scales. However at local scales the design of adequate wildlife corridors to enable ecosystem migration and ameliorate the impact of climate change would not be possible. Environmental justice outcomes can also change with different scales of assessment and generally decreases as scale increases from local to regional to state (Moore and Bache 1997). Distributive justice, where the benefits and costs of decisions are shared, was considerably more difficult at the large scale of the Upper North East region where a number of sawmills were closed and one opened, differentially affecting small towns. It remains a difficult proposition to balance 'biophysical, cultural, economic, political, and administrative boundaries' (Dovers 2000) in deciding scales of interest however tiering of assessment can accommodate this.

Public participation

Public participation in the CRA process reached the level of partnership on Arstien's (1969) ladder of participation. However as the process continued participation was progressively decreased. At the negotiations for the Eden region, in November 1997, a number of minor stakeholders were present although with lesser authority than the major stakeholders. In the negotiations for the Upper and Lower North East regions, in October 1998, minor stakeholders were barred as were indigenous representatives leading to the obvious conclusion that 'state and Federal governments don't see indigenous groups as main non-government players' (Docker 1998). By the Southern region negotiations, in November 1999, all non-government stakeholders were excluded from direct negotiation over the CAR reserve system.

Environmental dispute resolution

Non-government stakeholders at the Eden negotiations were assured by government that if consensus between them were reached then the decision would be implemented. However the vastly divergent value systems between stakeholders made this almost impossible and the NSW government unilaterally decided on a CAR reserve system. Mediation was attempted for the North East region negotiations, held simultaneously, but this failed on political grounds. The timber industry, through the Forest Products Association, struck a deal with the Carr government to support the marginal seat of Clarence on the north coast

¹⁰ IBRA stands for the Interim Biogeographic Regionalisation of Australia which divides the continent into eighty regions.

in return for a reduced reserve system (Hogarth 1998). This resulted in the negotiations being considered a farce and in a severely reduced reserve outcome compared to all other regions in NSW.

As an exercise in environmental dispute resolution (EDR) the CRA/RFA process in NSW has patently failed; as a conservation group's media release after the North East negotiations shows 'there will be no peace in the forests, no trust in Labor party promises and no rest in community campaigns to protect forests' (NEFA 1998). Whilst working together over four years meant that all participants developed close relationships, a key to avoiding some of the acuminous and costly aspects of the process (Neumann 1999), it was insufficient to enable resolution. Directing attention to towards contextual factors such as timeframes, power and number of stakeholders, and jurisdictional complexity undermines the resolution process and focus must be kept on important EDR requirements (Moore and Lee 1999).

The process failed because it failed to meet any of the following EDR requirements:

- ◆ meet the legitimate needs of each side
- ◆ arrive at a just solution which resolves conflict fairly
- ◆ arrive at an agreement which is desirable
- ◆ involve stakeholders in the process as well as the agreement
- ◆ take account of community interest and values (Fisher *et al.* in Newmann 1999)

However in south east Queensland an agreement was reached between conservation and timber interests that met all of the above criteria through the establishment of a plantation resource. The reasons for this were twofold, a low requirement for timber from the region and stakeholders developing their own process (RN 1999). Thus it can be seen that not only involvement by all stakeholders but an open agenda is vital to a legitimate assessment process (Forrester 1999). This moves negotiation away from the belief in a zero sum situation, where gains by one group are dependent on losses to another and competing for the biggest share of pie is rational (Wondolleck & Yaffee 2000).

Tools

The CRA process in NSW used a number of tools for collecting, analysing and assessing data (see Table 2). Of these tools some were more widely accepted than others during the process, which could usually be linked to the stakeholder's environmental values. The timber industry voted unsuccessfully against using the outcomes for minimum viable populations (EHTC 1997). Whilst the conservation movement referred the FRAMES modelling system to the NSW Auditor-General who found resource commitments upon which it was based could probably not be met (AG 1998). C-PLAN was a new decision-support tool that combined hundreds of data layers to allow complex selection rules including biodiversity targets and timber resource value. As a tool C-PLAN was highly functional however it probably aided in shifting focus from the requirements of EDR as suggested in the previous section.

Table 2: Tools used in the NSW CRA process

Tool	Application	Stage utilised
Modelling	Distributions, habitat quality and minimum viable populations of fauna and flora	During CRA to develop targets and layers for use in negotiations
	Social impact analysis	During negotiations to assess impact of options
	Forest resource and management systems (FRAMES)	During negotiations to assess long-term timber yields from various options and management systems, and to inform reserve design
	Economic impact to wood based industries (FORUM)	During negotiations to assess impact of options
Geographic Information System (GIS)	Brining together spatial data	During CRA in model development As the basis for spatial information assessment during negotiations
C-PLAN	High level decision-support system for multi-criteria analysis	Attached to GIS to develop options during negotiations
Strategic environmental assessment (SEA)	Methodology for organising various strands of policy development to increase sustainability of decision-making	Not explicitly used but could incorporate entire life of forest policy development and implementation

Strategic environmental assessment

The emerging methodology of SEA as a meta-tool is not mentioned in any CRA documents. It is however useful to assess if the RFA policy development and implementation meets SEA requirements. From Table 3 it can be seen that the RFA/CRA process largely fails as an example of SEA. Further it failed to meet the expansive SEA objectives of providing a holistic understanding of environmental and social implications and expanding the focus beyond the original policy rationale (Brown and Thérivel 2000). For example the Eden options report failed to provide a cost/benefit analysis combining the three pillars of sustainability¹¹ and ‘external’ impacts such as climate change and water yield from forests were ignored or evaded.

Table 3: Fulfilment of SEA requirements by NSW RFA/CRA process

Requirement	Achievement by NSW RFA/CRA
Legal	
Legal basis to SEA	Well supported by intergovernmental agreements however failure of <i>Regional Forests Agreement Bill</i> 1999 (Cth) raises questions of enforceability of RFA compensation provisions (Forsyth 1998)
Provisions for litigation	The <i>Forestry and National Park Estate Act</i> 1998 (NSW) removes third party rights to litigate over forestry operations
Scoping	
Terms of reference developed though public participation	The Scoping Agreement for New South Wales Regional Forest Agreements was developed without public input
Tiering possible	The Scoping agreement provided for only one level of assessment
Assessment and reporting	
Assessment of alternative proposals	Achieved for Eden and North East regions but not for Southern
Draft report	No regions
Participation and publication	
Final report	Eden and Southern regions only
Public comment sought	Eden and Southern regions only
Review and decision-making	
Review draft report	Not possible
Taking previous SEA stages into account	Eden and Southern only
Publication of decision and justification including	No regions
Monitoring and Auditing	
Provision for monitoring and auditing	5 yearly reviews of RFA provided but scope restricted to ESFM considerations listed
Requirement to amend RFA according to findings	RFA not open to re-negotiation apart from ‘minor modifications’ (CoA & NSW 1999 cl. 38)

(Based on von Seht 1999)

¹¹ The three pillars of sustainability are environment, economic and social systems which are interconnected by services and impacts each has on the others.

Scientific credibility

Given public perceptions developed from industry claims that the Eden RFA was a 'scientifically based outcome' (BDN 2000) and over 50 scientists world wide writing to Premier Carr urging a 'scientifically valid' assessment (NSWFA 1998), it is important to assess if the CRAs in NSW met current scientific standards. Horwitz and Calver (1998) list four criteria to evaluate the scientific performance of a government process¹²:

1. has the process provided a framework for scientific debate?
2. has the process involved scientists, and if so what is their affiliation?
3. has the process used scientific norms of publication, peer review, and conferences?
4. has the process involved explicit methodology from which conclusions can be justifiably drawn?

The CRA process in NSW did not provide for open and public scientific debate. Debate was held within selected groups of experts for a number of aspects of biodiversity including forest ecosystem delineation, old growth definition, and species distributions and population viability analysis. Selection of scientific experts to attend workshops was done using the Delphi method¹³ of ranking (Mendoza & Prabhu 2000) by the E&HTC which ensured a spread of independent scientists across the value spectrum. Methodology was explicit and published in documents for each project though these were not publicly available. The process' greatest downfall is in the field of peer review.

The Society for Conservation Biology states that:

'ISR [independent scientific review] should be employed principally when an agency decision rests ... on scientific judgements or management actions that are controversial, seriously disputed, or arguably insufficient, especially in cases where the decision carries the risk of creating lasting negative effects on environmental quality, nature, the economy or communities ... [such as] long-term or large-scale forest management plans ... [where] scientific participation and oversight are not equivalent to ISR ... [otherwise] any claim of objectivity and scientific validity may be suspect.'

(Meffe *et al.* 1998)

At no time were decisions open to peer review. A Joint Scientific Advisory Group was established by the Scoping Agreement to adjudicate scientific disputes (CoA & NSW 1996 att.1 cl.4), however this option was never used. Further the Scientific Advisory Group which determined the draft JANIS criteria, which have been criticised as lacking scientific basis, did not have nor demand peer review (Recher 1998). The CRA process, with high uncertainty, high decision stakes and different values systems between stakeholders requires an assessment based on the principles of post normal science (Harding 1998 p.99).

Post normal science

Uncertainty is integral to a self-organising, holarchically nested networks¹⁴ such as ecosystems, especially so when only one or two levels are considered, such as species populations and ecosystems but not genetic diversity or meta-populations. The linear nature of 'Newtonian' science is inadequate here. What is required is reflexive discourse which allows for diverse forms of knowledge that facilitate mutual learning between

¹² These were used by Horwitz and Calver (1998) to assess the scientific credibility of the RFA process in Western Australia, which was found wanting.

¹³ The Delphi method requires independent decisions without opinion sharing, opposed to the 'nominal group process' which allows for opinion sharing and decisions can be on a consensus basis or individual voting.

¹⁴ These represent a number of systems each nested within another with reciprocal relationships between levels.

governments and stakeholders as to what the trade-offs and uncertainties of decisions are and how they are distributed. Post normal science requires stakeholder participation because their views reflect the problem context, ie the interplay between pillars of sustainability. Science's role shifts from predictions to narrative description of the systems possible future states, and decision-making becomes a reflexive process of inquiry and learning rather than of acquiring new and better tools and recipes (Kay *et al.* 1999 and Tognetti 1999).

Impacts of the RFA decision

The CRA process in NSW led directly to the reservation of 780,000 ha of public forest estate. As opposed to most previous reservation decisions it consisted of the most biologically rich or diverse areas, not those with little economic value. The decisions on the Southern and Eden regions were given heavily qualified praise by the conservation movement however it widely condemned the Upper and Lower North East region decisions. Yet forest blockades continue in all CRA/RFA regions. There are two possible reasons for this, the decisions were inadequate for conservation movement value systems or the conservation movement judged the process a failure due to victim mentality¹⁵ (Moyer 1990).

Timber supplies were generally maintained at pre-decision levels, though these had been significantly reduced as a result of the IAP. The timber industry also received resource security in the form of 20-year timber resource guarantees. The 20-year life of the RFAs limit any future decisions regarding natural resource management in the forest sector in NSW. Further the Commonwealth has divested itself of the power to act under a number of pieces of legislation¹⁶ (CoA & NSW 1999). The result is that changing societal values or scientific knowledge are unlikely to affect the new *status quo* for the life of the RFA policy. However changes in consumer and timber industry requirements for sawn timber and woodchips could dramatically affect management regimes.

Conclusion

Regardless of the objective attributed to the CRA/RFA process in NSW it must be seen as a failure. The Commonwealth's intention to politically distance itself from environmental problems regarding forests has spectacularly failed in the short term though may reap benefits over a longer period. As EDR and SEA it has also been shown to be a failure. This was largely due to the focus on the formulation stage of the process, ignoring the inclusion of diverse values through public participation in the agenda, implementation and evaluation stages. The belief that the formulation stage provides the greatest gains in decision-making is fallacious (Barkenbus 1998). The lack of scientific credibility towards the vast amount of data gathered regarding numerous aspects of biodiversity makes its use in future SEA questionable. Instead of being an instrument for integration of government bodies and policies regarding forests the CRA/RFA process has reduced the diversity of input on environmental problems in this area. In the application of post normal science a reduction in diversity of inputs results in increased uncertainty, risk and a reduction in policy responses to changing conditions. This has serious implications for the future sustainability of the forest estate.

¹⁵ Victim mentality is a desire to remain the powerless, but moral, underdog ie not corrupted or coopted (Moyer 1990).

¹⁶ These being the *Environment Protection (Impact of Proposals) Act 1974* (C'wth), *Endangered Species Protection Act 1992* (C'wth), *Australian Heritage Commission Act 1975* (C'wth), and the *Export Control Act 1982* (C'wth).

Glossary of acronyms

CRA	Comprehensive Regional Assessment
DFA	Deferred Forest Areas
E&HTC	Environment and Heritage Technical Committee
EDR	Environmental Dispute Resolution
EDS	Ecologically Sustainable Development
ESFM	Ecologically Sustainable Forest Management
FRAMES	Forest resource and management systems
IAP	Interim Assessment Process
IBRA	Interim Biogeographic Regionalisation of Australia
IGAE	Intergovernmental Agreement on the Environment
JANIS	Joint ANZECC / MCFFA National Forest Policy Statement Implementation Sub-committee
NFPS	National Forest Policy Statement
NSESD	National Strategy for Ecologically Sustainable Development
RFA	Regional Forest Agreement
RFF	Regional Forest Forums
SEA	Strategic Environmental Assessment

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